PERSONAL CARE

Anti-Aging
- Collagenases & Gelatinases
- Proteases
- Cell Proliferation
- Oxidative Stress

Irritation & Corrosion

Allergy & Inflammation

Genotoxicity

Carcinogenesis

Endocrine Disruption

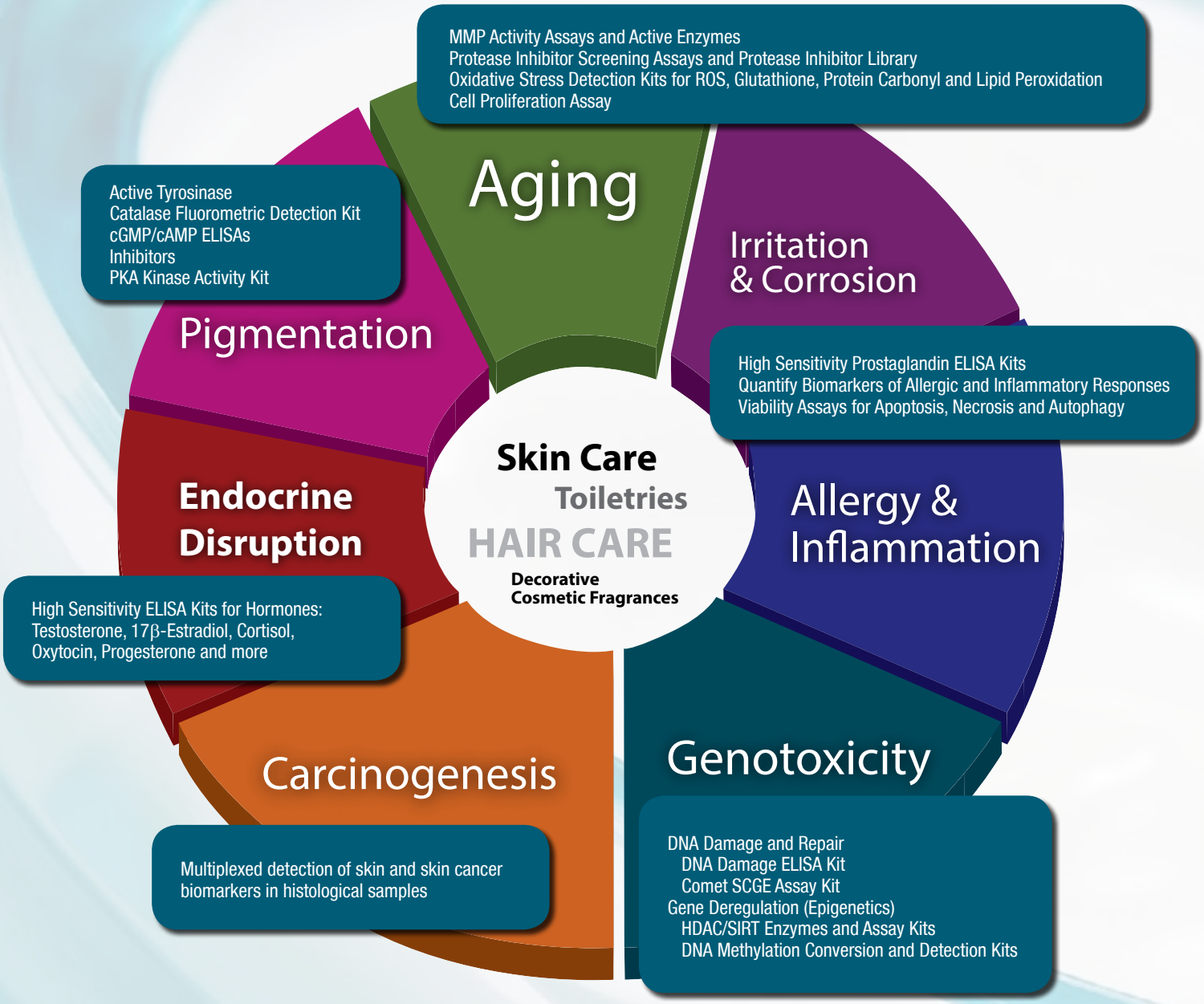
Pigmentation

Safety & Toxicity Testing

Natural Products & Compound Screening

INTEGRATED SOLUTIONS FOR PERSONAL CARE DEVELOPMENT

The skin functions as the primary line of defense against extrinsic stress such as UV-induced photo-damage, insults from microbial infections and physical deterioration resulting from aging and environmental exposure. As such, cosmetic industry scientists have utilized both basic and clinical research methods to develop effective ingredients for health and beauty products. The Enzo Life Sciences product portfolio provides assays and reagents for all phases of personal care product development to facilitate rapid discovery and enhanced testing for safety, toxicity and efficacy.



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ANTI-AGING

COLLAGENASES & GELATINASES

Collagenases (Matrix Metalloproteinase-1, MMP-8, and MMP-13) and gelatinases (MMP-2 and MMP-9) break down skin collagens, contributing to aging and wrinkling. Enzo offers high sensitivity colorimetric and fluorometric activity assays for screening collagenase and gelatinase inhibitors. Each assay is built using high purity active enzymes, and includes substrate, 96-well plate, and protocol.

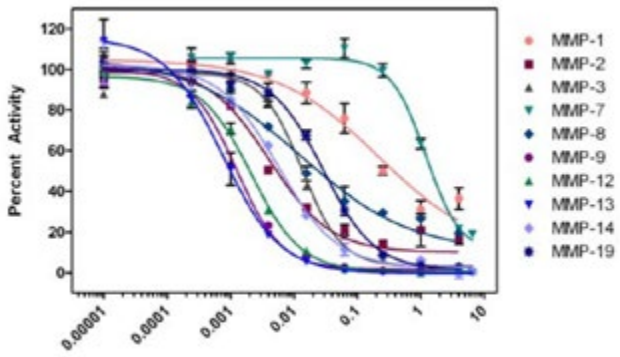
Optimized Detection of MMP Inhibitors

Matrix Metalloproteinase (MMP) Inhibitor Profiling Kit, Fluorometric RED (BML-AK308)

Inhibition of MMPs has been a target for inflammation, wound healing, skin aging, skin tone discoloration, rosacea, acne, and hair growth modulation. Our OMNIMMP® RED substrate offers key advantages over other substrates used for screening MMP inhibitors.

- Emission spectrum avoids the interference at lower wavelengths often exhibited by certain screening compounds
- Ultra-strong fluorescence allows for substrate concentrations much lower than the K_m, which is desirable for inhibitor screening assays
- Superior solubility characteristics compared with other MMP substrates
- Convenient real-time kinetics of cleavage is easily determined
- Includes active recombinant enzyme, substrate, and assay buffer

Inhibitor Dose-response Curve



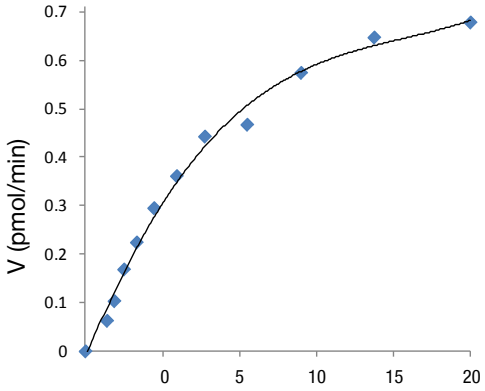
NNGH was pre-incubated with MMP enzyme before reactions were initiated by the addition of substrate.

Screen For Inhibitors of Specific MMPs

Matrix Metalloproteinase-1 (MMP-1) Fluorometric Drug Discovery Kit, RED (BML-AK301)

- Flexible platforms available for colorimetric and fluorometric detection
- Sensitive detection for specific broad range of MMPs
- Includes high quality substrate, enzyme, and prototypic control inhibitor

K_{cat}/K_m Determination for MMP-1



MMP Assay Kits		
Product Name	**Product #**	**Size**
Matrix Metalloproteinase (MMP) Inhibitor Profiling Kit, Fluorometric Red	BML-AK308	1x96 Wells
MMP-1 Colorimetric Drug Discovery Kit	BML-AK404	1x96 Wells
MMP-1 Fluorometric Drug Discovery Kit	BML-AK405	1x96 Wells
MMP-1 Fluorometric Drug Discovery Kit, RED	BML-AK301	1x96 Wells
MMP-2 Colorimetric Drug Discovery Kit	BML-AK408	1x96 Wells

MMP Assay Kits		
Product Name	**Product #**	**Size**
MMP-2 Fluorometric Drug Discovery Kit	BML-AK409	1x96 Wells
MMP-2 Fluorometric Drug Discovery Kit, RED	BML-AK302	1x96 Wells
MMP-3 Colorimetric Drug Discovery Kit	BML-AK400	1x96 Wells
MMP-3 Fluorometric Drug Discovery Kit	BML-AK401	1x96 Wells
MMP-3 Fluorometric Drug Discovery Kit, GREEN	BML-AK303	1x96 Wells
MMP-3 Fluorometric Drug Discovery Kit, RED	BML-AK311	1x96 Wells
MMP-7 Colorimetric Drug Discovery Kit	BML-AK406	1x96 Wells
MMP-7 Fluorometric Drug Discovery Kit	BML-AK407	1x96 Wells
MMP-7 Fluorometric Drug Discovery Kit, RED	BML-AK304	1x96 Wells
MMP-8 Colorimetric Drug Discovery Kit	BML-AK414	1x96 Wells
MMP-8 Fluorometric Drug Discovery Kit	BML-AK415	1x96 Wells
MMP-8 Fluorometric Drug Discovery Kit, RED	BML-AK305	1x96 Wells
MMP-9 Colorimetric Drug Discovery Kit	BML-AK410	1x96 Wells
MMP-9 Fluorometric Drug Discovery Kit	BML-AK411	1x96 Wells
MMP-9 Fluorometric Drug Discovery Kit, RED	BML-AK306	1x96 Wells
MMP-10 Fluorometric Drug Discovery Kit	BML-AK419	1x96 Wells
MMP-12 Colorimetric Drug Discovery Kit	BML-AK402	1x96 Wells
MMP-12 Fluorometric Drug Discovery Kit	BML-AK403	1x96 Wells
MMP-12 Fluorometric Drug Discovery Kit, GREEN	BML-AK312	1x96 Wells
MMP-13 Colorimetric Drug Discovery Kit	BML-AK412	1x96 Wells
MMP-13 Fluorometric Drug Discovery Kit	BML-AK413	1x96 Wells
MMP-14 Colorimetric Drug Discovery Kit	BML-AK416	1x96 Wells
MMP-14 Fluorometric Drug Discovery Kit	BML-AK417	1x96 Wells
MMP-19 Fluorometric Drug Discovery Kit, RED	BML-AK307	1x96 Wells
MMP-20 Colorimetric Drug Discovery Kit	BML-AK422	1x96 Wells

Substrates		
Product Name	**Product #**	**Size**
Cathepsin D & E Substrate (fluorogenic)	BML-P145	1 mg
Dnp-Pro-Leu-Gly-Met-Trp-Ser-Arg-OH	ALX-260-120	5 mg
Mca-Lys-Pro-Leu-Gly-Leu-Dpa-Ala-Arg-NH_2 (fluorogenic substrate)	BML-P276	1 mg
Mca-Pro-Leu-Ala-Nva-Dap(Dnp)-Ala-Arg-NH_2	ALX-260-123	1 mg
Mca-RPPGFSAFK(Dnp)	BML-P227	1 mg
MMP Substrate (chromogenic)	BML-P125	5 mg
MMP Substrate (fluorogenic)	BML-P128	1 mg
MMP Substrate α (fluorogenic)	BML-P131	1 mg
MMP-3 Fluorogenic Substrate	BML-P278	0.1 mg
OMNIMMP® Fluorogenic Control	BML-P127	1 mg
OMNIMMP® Fluorogenic Substrate	BML-P126	1 mg
OMNIMMP® RED Fluorogenic Substrate	BML-P277	0.1 mg
TACE Substrate (fluorogenic)	BML-P132	0.5 mg

ANTI-AGING

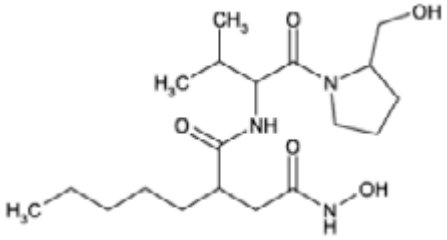
Evaluation of extracellular matrix proteins and metalloproteinases

Enzo provides a comprehensive portfolio of products for MMP research including active enzymes, antibodies, and high purity MMP inhibitors to suit your research needs.

Active MMPs and Proteins		
Product Name	**Product #**	**Size**
Matrix Metalloproteinase (MMP) multipack-1	BML-AK013	10 µg each
Matrix Metalloproteinase (MMP) multipack-2	BML-AK014	10 µg each
MMP-1 (catalytic domain) (human), (recombinant)	BML-SE180	10 µg
MMP-1 proenzyme (human fibroblasts)	ALX-200-418	5 µg
MMP-2 (catalytic domain) (human), (recombinant)	BML-SE237	10 µg
MMP-2 (human fibroblasts), (purified)	BML-SE503	5 µg
MMP-2 (mouse fibroblasts), (purified)	BML-SE505	5 µg
MMP-2 proenzyme (human fibroblasts)	ALX-200-419	5 µg
MMP-2 proenzyme (human), (recombinant)	ALX-201-095	10 µg
MMP-2/TIMP-2 proenzyme complex (human fibroblasts)	ALX-200-420	5 µg
MMP-3 (catalytic domain) (human), (recombinant)	ALX-201-042	5 µg
MMP-7 (catalytic domain) (human), (recombinant)	BML-SE181	10 µg
MMP-7 (human), immunoblotting standard	BML-SW119	300 µL
MMP-8 (catalytic domain) (human), (recombinant)	BML-SE255	10 µg
MMP-8 (human neutrophils), (purified)	BML-SE492	5 µg
MMP-8 proenzyme (human neutrophils)	ALX-200-421	5 µg
MMP-9 (catalytic domain) (human), (recombinant, *E. coli*)	BML-SE360	10 µg
MMP-9 (human neutrophils), (purified)	BML-SE504	5 µg
MMP-9 (human neutrophils), dimer	ALX-200-423	5 µg
MMP-9 proenzyme (human neutrophils), monomer	ALX-200-422	5 µg
MMP-9 proenzyme (human), monomer	ALX-200-430	10 µg
MMP-10 (catalytic domain) (human), (recombinant)	BML-SE329	10 µg
MMP-11 (catalytic domain) (human), (recombinant)	BML-SE282	10 µg
MMP-12 (catalytic domain), (human) (recombinant)	BML-SE138	10 µg
MMP-13 (catalytic domain) (human), (recombinant)	BML-SE246	10 µg
MMP-13 (human), (recombinant)	BML-SE493	10 µg
MMP-14 (catalytic domain) (human), (recombinant)	BML-SE259	10 µg
MMP-14 (catalytic domain) (human), (recombinant)	ALX-201-098	10 µg
MMP-14 prodomain (catalytic domain) (human), (recombinant) (His-tag)	ALX-201-099	10 µg
MMP-14 proenzyme (soluble) (human), (recombinant) (His-tag)	ALX-201-100	10 µg
MMP-19 (catalytic domain) (human), (recombinant)	BML-SE561	10 µg
MMP-20 (catalytic domain) (human), (recombinant)	BML-SE540	10 µg
MMP-24 (catalytic domain) (human), (recombinant) (His-tag)	ALX-201-105	10 µg

MMP Inhibitors		
Product Name	**Product #**	**Size**
Actinonin	ALX-260-128	5 mg
CL-82198	BML-EI302	5 mg, 25 mg
CTT	BML-PI136	1 mg, 5 mg
Doxycycline . hyclate	ALX-380-273	1 g, 5 g
GM-6001	BML-EI300	1 mg, 5 mg
Isobavachalcone	ALX-350-145	1 mg
MMP-3 inhibitor	ALX-260-165	1 mg, 5 mg
NNGH	BML-PI115	5 mg, 25 mg
PF-356231	BML-PI155	1 mg, 5 mg
SB-3CT	BML-EI325	1 mg, 5 mg
STT Negative Control for Gelatinase	BML-PI137	1 mg, 5 mg
TAPI-0	BML-PI133	1 mg
TAPI-1	BML-PI134	1 mg
TAPI-2	BML-PI135	1 mg
Z-Pro-Leu-Gly-NHOH	BML-PI139	100 mg

Actinonin (ALX-260-128)

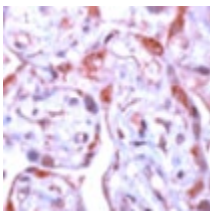


- Known inhibitor of select MMPs (-1, -2, -3, -7, -8, -9, -10, -12, -13)
- High purity, ≥98%
- Widely cited for various applications involving its inhibitory and antibiotic properties

MMP-specific Antibodies		
Product Name	**Product #**	**Size**
MMP-1, pAb	ADI-905-472	1 mL
MMP-1, pAb	ALX-210-876	100 µg
MMP-2 (CT), pAb	BML-SA616	50 µg
MMP-2 (hinge region), pAb	BML-SA679	100 µg
MMP-2, pAb	ALX-210-753	500 µL
MMP-3, pAb	BML-SA104	100 µg
MMP-7 (CT), pAb	BML-SA625	50 µg
MMP-7, mAb (2D3)	ADI-905-1013	100 µg
MMP-9 (CT), pAb	BML-SA620	500 µL
MMP-9 (hinge region), pAb	BML-SA680	100 µg
MMP-9, pAb	ALX-210-756	100 µg
MMP-10 (human) (hinge region), pAb	BML-SA434	100 µg
MMP-12 (CT), pAb	BML-SA467	100 µL
MMP-12 (hinge region), pAb	BML-SA669	100 µg
MMP-13 (hinge region), pAb	BML-SA626	50 µg
MMP-13 (human), mAb (M53)	ALX-804-365	100 µL
MMP-13 (human), pAb	ALX-210-833	100 µL

MMP-1, pAb (ADI-905-472)

- Recognizes human MMP-1
- Validated for IHC



Immunohistochemical analysis of human placenta stained with MMP-1, pAb.

PROTEASES

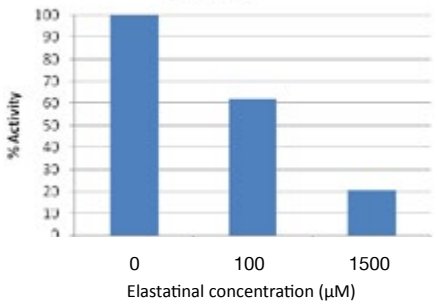
Rapidly screen inhibitors of key enzymes regulating elasticity

Cathepsins, Granzymes and Elastases are involved in regulatory mechanisms in human skin and act as biomarkers for decreased skin elasticity due to UV exposure in photoaged human skin.

Neutrophil Elastase Colorimetric Drug Discovery Kit (BML-AK497)
Neutrophil elastase is a serine protease found in polymorphonuclear neutrophils that functions in inflammation.

- Rapid, sensitive, and reliable results for the screening of neutrophil elastase inhibitors
- Kit includes elastatinal, a known elastase inhibitor, as a control
- Amenable to high-throughput screening

Percent Inhibition of HNE by Elastatinal



Using the elastase inhibitor, elastatinal, the % activity remaining can be calculated.

Protease Assay Kits & Substrates		
Product Name	**Product #**	**Size**
Cathepsin D & E Substrate (fluorogenic)	BML-P145	1 mg
Cathepsin K Drug Discovery Kit	BML-AK430	1x96 Wells
Cathepsin S Drug Discovery Kit	BML-AK431	1x96 Wells
CV-Cathepsin B Detection Kit	BML-AK125	1x96 Wells
CV-Cathepsin K Detection Kit	BML-AK126	1x96 Wells
CV-Cathepsin L Detection Kit	BML-AK127	1x96 Wells
Granzyme B Assay Kit for Drug Discovery	BML-AK711	1x96 Wells
Neutrophil Elastase Colorimetric Drug Discovery Kit	BML-AK497	1x96 Wells
OMNICATHEPSIN® Fluorogenic Substrate	BML-P139	10 mg, 50 mg
PMN-Elastase (Human) ELISA Kit	ALX-850-265	1x96 Wells

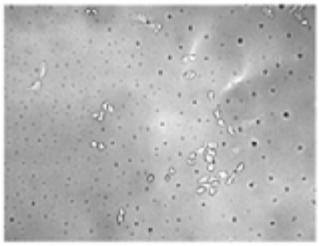
Protease-Specific Antibodies		
Cathepsin B (human), pAb	BML-SA361	100 µL
Cathepsin D (human), pAb	BML-SA398	100 µL
Cathepsin G (human), pAb	BML-SA354	100 µL
Cathepsin H (human), pAb	BML-SA355	100 µL
Cathepsin L (human), pAb	BML-SA362	100 µL
Cathepsin L/procathepsin L (human), mAb (CLP 1/36)	ALX-804-292	200 µg
Cathepsin L/procathepsin L, mAb (CPLH 33/2)	ALX-804-291	100 µg
Cathepsin L/procathepsin L, mAb (CPLH 3G10)	ALX-804-293	200 µg
Collagen Type I, mAb (5D8)	BPD-CSI-008-01	200 µg, 1 mg
Collagen Type III, mAb (1E7-D7/Col3)	BPD-CSI-007-01	200 µg
Collagen Type XII, mAb (378D5)	ALX-803-309	100 µL
Granzyme B (human), mAb (B18.1)	ALX-804-121	100 µg
Granzyme B (human), mAb (B18.1) (FITC conjugate)	ALX-804-121F	100 Tests
Granzyme B (human), mAb (GrB7)	ALX-804-198	50 µg
Neutrophil elastase (human), (purified)	BML-SE284	100 µL

Active Proteases and Related Proteins		
Product Name	**Product #**	**Size**
Cathepsin B (human liver), (purified)	BML-SE198	25 µg
Cathepsin D (human liver), (purified)	BML-SE199	25 µg
Cathepsin D (human), (recombinant) (His-tag)	ADI-908-241	10 µg
Cathepsin F (human), (recombinant)	BML-SE568	5 µg
Cathepsin G (human neutrophils), (purified)	BML-SE283	100 µg
Cathepsin H (human liver), (purified)	BML-SE200	25 µg
Cathepsin K (human), (recombinant)	BML-SE553	10 µg
Cathepsin L (human liver), (purified)	BML-SE201	25 µg
Cathepsin S (human), (recombinant)	BML-SE453	10 µg
Collagen I, rat tail	ALX-522-435	20 mg, 100 mg
Collagen I, rat tail (thin plate coating)	ALX-522-440	50 mL
Elafin (human), (recombinant)	ALX-201-240	100 µg
Granzyme A (human)	ALX-200-605	10 µg
Granzyme A (human), (recombinant)	ALX-201-118	10 µg
Granzyme B (human lymphocytes)	ALX-200-602	10 µg
Granzyme B (human), (recombinant)	BML-SE238	5000 U
Granzyme K (human), (recombinant)	ALX-201-117	10 µg
Neutrophil elastase (human), (purified)	BML-SE284	100 µg
Procathepsin F (human), (recombinant)	BML-SE541	5 µg
Procathepsin K (human), (recombinant)	BML-SE367	10 µg
Procathepsin K (human), (recombinant)	ALX-201-239	10 µg
Procathepsin V (human), (recombinant) (His-tag)	BML-SE554	10 µg
SLPI (human), (recombinant) (His-tag)	ADI-908-304	10 µg

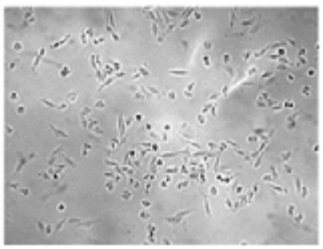
Collagen I, Rat Tail (ALX-522-435)

- High Purity, ≥90% (SDS-PAGE)
- Sterile format for cell culture applications
- Also available as a ready-to-use reagent for thin plate coating (ALX-522-440)

Untreated



Treated



Collagen I was tested in a cell proliferation assay. Increased attachment of cells on collagen-coated coverslips was observed following culture.

Protease Modulators		
Product Name	**Product #**	**Size**
3,4 Dichloroisocoumarin	BML-PI110	10 mg
Azelastine . HCl	BML-NH108	100 mg
Elastatinal	BML-PI103	5 mg, 25 mg

Are you screening for protease inhibitors?

Our SCREEN-WELL® Protease Inhibitor Library includes 53 known protease inhibitors on a single 96-well plate.

CELL PROLIFERATION

Convenient Assays, Sensitive Results

Cell Counting Kit-8 (ALX-850-039)

A high-sensitivity colorimetric assay for the determination of the number of viable cells, using WST-8, in cell proliferation and cytotoxicity assays. This critical assay can be used to screen modulators of cell proliferation that affect the appearance of wrinkles and other signs of aging.

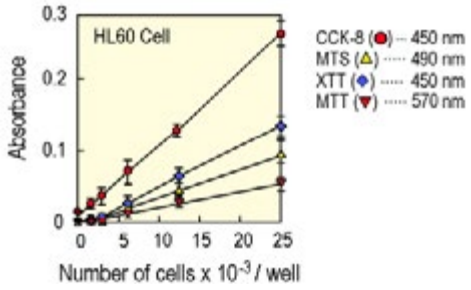
- More sensitive than MTT, XTT, MTS or WST-1
- Ready-to-use solution can be added directly to the cell media
- No organic solvents or isotopes required
- No harvesting, washing, or solubilization steps
- Amenable to high-throughput screening

Cell Proliferation Assay		
Product Name	**Product #**	**Size**
Cell Counting Kit-8	ALX-850-039	500 Tests, 5x500 Tests

Proliferation Related ELISA Kits		
Product Name	**Product #**	**Size**
Erk1/2 ELISA Kit	ADI-900-152	1x96 Wells
[pThr^{202}/Tyr^{204}]Erk1/2 ELISA Kit	ADI-900-098A	1x96 Wells
IGF-1 (human), ELISA Kit	ADI-900-150	1x96 Wells
TGF-β1 ELISA Kit	ADI-900-155	1x96 Wells

Cell Proliferation Inhibitors		
Product Name	**Product #**	**Size**
Tyrphostin AG 1024	ALX-270-217	1 mg, 5 mg
Reveromycin A	ALX-380-216	0.25 mg
Reveromycin D	ALX-380-219	0.25 mg

High-sensitivity Cell Proliferation Assay



CTLL-2 cells were incubated with various concentrations of IL-2 for 72 hours. CCK-8 solution was added to each well and the absorbance at 450 nm was measured. IL-2 exposure resulted in increased absorbance, which correlates to an increase in cell proliferation.

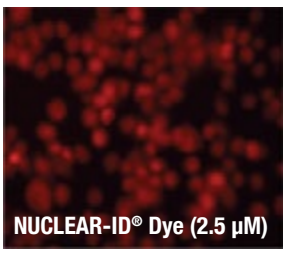
The Brightest, Most Sensitive Cell Cycle Analysis Dye for Live Cells

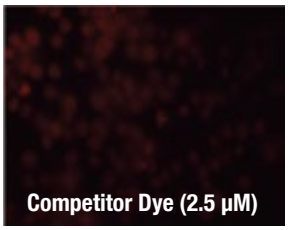
NUCLEAR-ID® Red Cell Cycle Kit (ENZ-51008)

Our stable NUCLEAR-ID® Red DNA stain crosses the membrane of live cells and specifically targets dsDNA. The dye can be used for various applications including nucleated cell gating in flow cytometry, DNA ploidy and cell cycle analysis, and cytoplasm segmentation in high content screening (HCS).

- Brighter, photostable red dye yields improved sensitivity
- Highly cell-permeable dye minimizes cell density optimization
- Lower cost per test than comparable dyes
- Suitable for multiplexing with green fluorophores, including GFP and FITC
- Available as a complete kit with controls or as a stand-alone dye

Brightest Dye for Cell Cycle Analysis





NUCLEAR-ID® Cell Cycle Analysis Kits		
Product Name	**Product #**	**Size**
NUCLEAR-ID® Red Cell Cycle Kit (GFP-CERTIFIED®)	ENZ-51008	1 Kit (100 assays)
NUCLEAR-ID® Green Cell Cycle Kit	ENZ-51014	1 Kit (100 assays)
NUCLEAR-ID® Red DNA Stain	ENZ-52406	200 µL

Growth Factors

Growth factors are frequently used in cosmetics to reverse the signs and symptoms of aging skin mediated by environmental elements.

Antibodies		
Product Name	**Product #**	**Size**
Fibroblast growth factor 2, mAb (3D9)	ADI-905-832	100 µL
Fibroblast growth factor 2, mAb (2H11)	ADI-905-833	100 µL
Fibroblast growth factor 1, mAb (4D2)	ADI-905-883	100 µL
Insulin-like growth factor-1 receptor, mAb (1-2)	BML-SA369	100 µg
TGF-βRIII (human), mAb (Jack-1)	ALX-804-871	100 µg

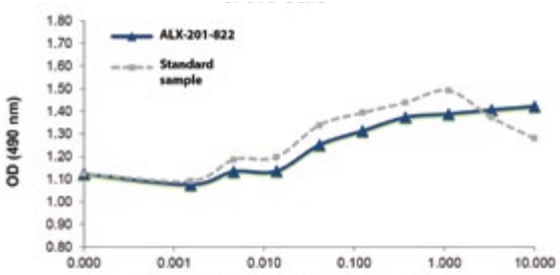
Active Proteins		
Product Name	**Product #**	**Size**
EGF (human), (recombinant)	ADI-908-060	100 µg
Epidermal Growth Factor (rat), (recombinant)	ALX-201-812	100 µg
FGF-21 (mouse), (recombinant)	ALX-201-401	10 µg
FGF-21 (mouse), (recombinant) (His-tag)	ALX-201-409	10 µg
FGF-basic 147 (human), (recombinant)	ALX-201-822	10 µg, 50 µg
FGF-basic 154 (human), (recombinant)	ALX-201-823	10 µg, 50 µg
FGF basic (mouse), (recombinant)	ALX-201-824	10 µg, 50 µg
IGF-1 (human), (recombinant)	ADI-908-059	20 µg
Insulin-like Growth Factor-1 Receptor (human), (recombinant) (GST-tag)	BML-SE232	20 µg
TGF-β3 (mouse), (recombinant)	ALX-201-817	10 µg, 100 µg

FGF-basic 147 (human) (ALX-201-822)

A critical factor in angiogenesis, wound healing and embryonic development

- Carrier-free
- High purity, ≥ 97%
- Activity tested in cell proliferation assay

Human FGF-basic-induced Proliferation of 3T3 Cells



3T3 cells were cultured with 0 to 10 ng/mL human FGF-basic. Cell proliferation was measured after 44 hours and the linear portion of the curve was used to calculate the ED50. The ED50 for this lot of human FGF-basic was 0.042-0.063 ng/mL. The typical expected range is less than 1 ng/mL.

ANTI-AGING

Determination of Antioxidant Capacity Through Oxidative Stress Biomarkers

Oxidative stress in response to aging and environmental stimuli can lead to tissue damage. Analysis of reactive oxygen species, mitochondrial dysfunction, lipid peroxidation and glutathione levels can provide an indication of the effectiveness of cosmetic and cosmeceutical formulations. Enzo offers a selection of assay kits which enable detection of oxidative stress from the nucleic acid level up through a complete whole cell analysis.

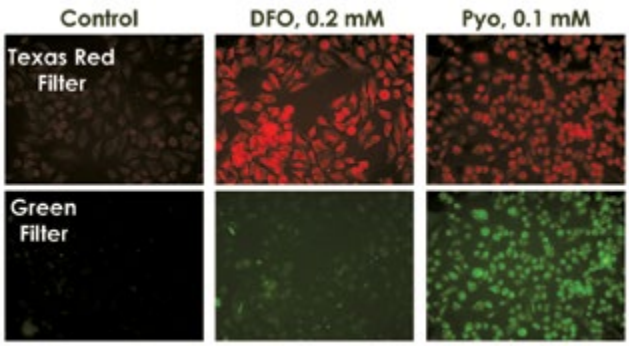
REACTIVE OXYGEN SPECIES

Multiplex, Real-time Analysis of Hypoxia and ROS in Live Cells

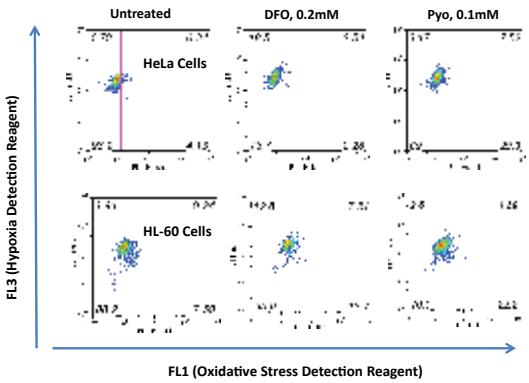
ROS-ID® Hypoxia/Oxidative Stress Detection Kit (ENZ-51042)

- Sensitive hypoxia dye fluoresces red when converted by nitroreductases
- Total ROS dye fluoresces green in presence of a variety of reactive oxygen species
- Non-toxic, cell-permeable dyes optimized to avoid artifactual fluorescence
- Suitable for microscopic or flow cytometric analysis of adherent or suspension cells
- Amenable to high-throughput screening

Simultaneously Monitor Hypoxic Status and ROS Formation



Quantitative Multiparametric Assay for Flow Cytometry



Bright red fluorescence of the hypoxia probe is observed following its conversion by cellular nitroreductases under hypoxic conditions such as those induced chemically by treatment with the hypoxia-mimetic desferrioxamine (DFO). The assay facilitates simultaneous quantification of hypoxic status (FL3/red) and presence of ROS (FL1/green) by flow cytometry.

ROS Detection Kits			
Product Name	**Product #**	**Application**	**Size**
ROS-ID® Hypoxia/Oxidative Stress Detection Kit	ENZ-51042		500 Microscopy or 100 Flow Cytometry Assays
ROS-ID® ROS/RNS Detection Kit for Microscopy	ENZ-51001		200 Assays
ROS-ID® Total ROS/Superoxide Detection Kit	ENZ-51010		200 Microscopy or 50 Flow Cytometry Assays
ROS-ID® Total ROS Detection Kit	ENZ-51011		200 Microscopy or 50 Flow Cytometry Assays

Probes for ROS		
Product Name	**Product #**	**Size**
5(6)-CDCFDA (ultra pure)	ENZ-52103	100 mg
CFDA (ultra pure)	ENZ-52104	100 mg
Dihydrorhodamine 123 (ultra pure)	ENZ-52302	10 mg
hROS, (detection reagent)	ADI-906-043	150 Tests
APF	ALX-620-075	1 mg
HPF	ALX-620-074	1 mg

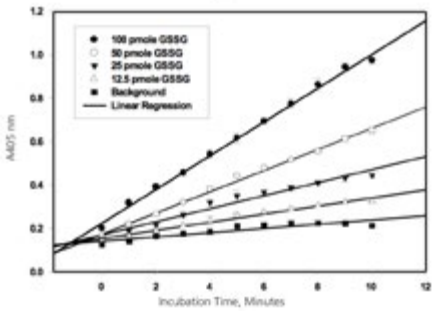
GLUTATHIONE

Glutathione (Total) Detection Kit (ADI-900-160)

Glutathione Reductase reduces oxidized glutathione (GSSG) to reduced glutathione (GSH). The sulfhydryl group of GSH reacts with DTNB (5,5'-dithiobis-2-nitrobenzoic acid, Ellman's reagent) to produce a yellow colored 5-thio-2-nitrobenzoic acid (TNB) that absorbs at 405 or 414 nm. The rate of TNB production is directly proportional to the concentration of glutathione in the sample.

- High-sensitivity enzymatic recycling reaction measures total, oxidized, or reduced glutathione
- Broad detection range: range (12.5 - 100 pmol/well)
- Easy-to-use sample handling protocols for a wide variety of matrices
- Convenient colorimetric 96-well plate format

Measure Oxidized and/or Reduced Glutathione



Change in absorbance at 405 nm versus incubation time as a function of pmoles of GSSG/well.

Glutathione Assay Kits & Probes		
Product Name	**Product #**	**Size**
Glutathione (total), Detection Kit	ADI-900-160	4x96 Wells
Glutathione Peroxidase Activity Kit	ADI-900-158	5x96 Wells
Glutathione Reductase Activity Kit	ADI-900-159	5x96 Wells
Monobromobimane (ultra pure)	ENZ-52501	25 mg

Glutathione Antibodies		
Product Name	**Product #**	**Size**
Glutathione, mAb (D8)	ADI-SPA-542	100 µg
Glutathione S-Transferase, mAb (8C1-G4)	ADI-905-618	100 µg

Glutathione Chemical Modulators		
Product Name	**Product #**	**Size**
5,8,11-Eicosatriynoic acid	BML-ET003	1 mg, 10 mg
Butein	ALX-350-246	10 mg
Buthionine sulfoximine	BML-FR117	500 mg
Cafestol	ALX-350-220	50 mg
Carmustine	ALX-400-037	25 mg
Curcumin (high purity)	ALX-350-028	10 mg, 50 mg, 250 mg
Ebselen	ALX-270-097	5 mg, 25 mg
Ethacrynic acid	BML-EI128	1 g
Kahweol	ALX-350-223	10 mg
Prostaglandin A2	BML-PG002	1 mg, 10 mg
RSSR	ALX-430-102	10 mg, 25 mg, 50 mg
S-(N-(3-Phenylpropyl)thiocarbamoyl)-L-cysteine	BML-T114	50 mg
Sedanolide	ALX-350-229	100 mg

ANTI-AGING

PROTEIN CARBONYLATION

Protein carbonylation is a known irreversible result of oxidative damage that can lead to protein aggregation and dysfunction

Protein Carbonyl ELISA Kit (ALX-850-312)

This convenient ELISA kit enables quantitative determination of carbonylated protein levels in plasma, other body fluids, cell and tissue extracts.

- High-sensitivity
- Low background
- Amenable to high-throughput analysis
- Validated and widely cited for various sample matrices

LIPID PEROXIDATION

Lipid peroxidation is a well-known example of oxidative damage, and lipid peroxides are prominent non-radical intermediates of lipid peroxidation. We offer a variety of assays and small molecules for screening the effects of anti-oxidants as potential inhibitors of this pathway.

ALDetect™ (MDA-specific) Lipid Peroxidation Assay Kit (BML-AK171)

Designed to assay free malondialdehyde (MDA) or, after a hydrolysis step, total MDA (i.e., free and protein-bound Schiff base conjugates). Features include:

- Minimal interference from other lipid peroxidation products, such as 4-hydroxyalkenals
- Assess MDA levels from a variety of sample types including tissue and cell lysates
- Rapid results in less than 1.5 hours

Lipid Peroxidation Assays		
Product Name	**Product #**	**Size**
ALDetect™ Lipid Peroxidation assay Kit	BML-AK170	100 Tests
ALDetect™ (MDA-specific) Lipid Peroxidation assay Kit	BML-AK171	25 Tests
OXI-TEK TBARS Assay Kit	ALX-850-287	160 Tests

Biochemical Modulators of Oxidative Stress		
(-)-Epigallocatechin gallate	ALX-270-263	10 mg, 50 mg
(Z)-4-Hydroxytamoxifen	ALX-550-361	1 mg, 5 mg
Auraptene	ALX-350-361	5 mg, 25 mg
Bakuchiol	ALX-350-144	1 mg
Caffeic acid phenylethyl ester	ALX-270-244	10 mg, 50 mg
Carazostatin	ALX-350-253	100 µg, 1 mg
Carnosic acid	ALX-270-264	10 mg, 50 mg
Celastrol	ALX-350-332	5 mg, 25 mg
Cinnamtannin B-1	ALX-350-365	5 mg
Idebenone	BML-FR114	20 mg, 100 mg
Morin	ALX-385-016	1 g
Ochratoxin A	ALX-630-089	1 mg, 5 mg, 25 mg
Pyrrolostatin	ALX-350-252	100 µg, 1 mg
Rosmarinic acid	ALX-270-253	10 mg, 50 mg
Trolox®	ALX-270-267	100 mg
U-74389G	BML-FR100	100 mg

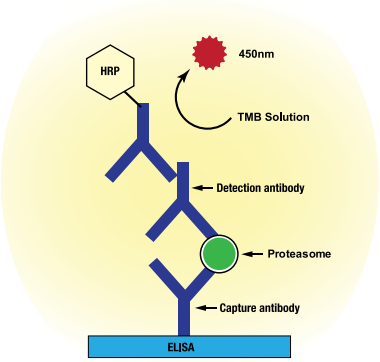
CELL DETOXIFICATION

Examine the link between cell detoxification and proteasome concentrations with the only commercially available kit for proteasome quantification

Proteasome ELISA Kit (BML-PW0575)

- Quantify 20S proteasome concentrations in biological samples (serum, plasma, cell lysates, tissue extracts)
- Investigate effects of inhibitors and activiations on levels of circulating proteasome

Quantify Circulating Levels of 20S Proteasome



Summary of Proteasome ELISA protocol

CELL SENESCENCE

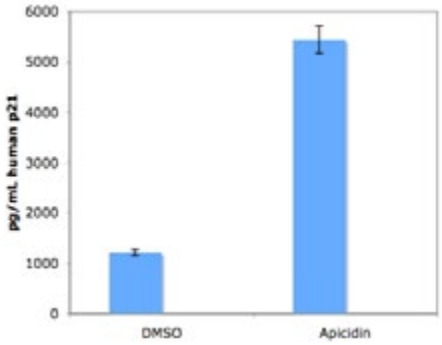
p21 ELISA Kit (ADI-900-161)

The p21 (human) ELISA kit is a colorimetric, immunometric enzyme immunoassay kit with results in 3 hours. Save time, money, and precious sample with fully quantitative results and increased sensitivity compared to Western blot analysis.

- Sensitive ELISA quantifies picogram levels compared to microgram levels in Western blot
- Excellent lot-to-lot reproducibility
- Easy-to-use liquid color-coded reagents reduce error

Related Products		
Product Name	**Product #**	**Size**
p21 ELISA Kit	ADI-900-161	1x96 Wells
Cellular Senescence Activity Assay	ENZ-KIT129	120 Assays
Cellular Senescence Live Cell Analysis Assay	ENZ-KIT130	10 Assays

Monitor Levels of p21, a Regulator of Senescence



Levels of p21 in control (DMSO- or Apicidin-treated HeLa cell lysates) as determined using p21 ELISA kit.

PROTEOSTASIS

AMP'D® HSP70 High Sensitivity ELISA Kit (ENZ-KIT101)

Ultra-sensitive AMP'D® HSP70 high sensitivity ELISA kit enabling the ability to use less sample and detect both baseline and upregulated levels of human, mouse and rat Hsp70 (Hsp72), a major chaperone, cancer biomarker, and key cell stress regulator.

- Ultra-sensitive measurement of Hsp70, detecting as little as 7 pg/mL
- Negligible reactivity from similar Hsp70 family members (Hsc70/Hsp73, Grp78, DnaK, or Hsp71)
- High-throughput format with results in 4.5 hours for up to 38 samples in duplicate
- Fully quantitative results that surpass semi-quantitative Western blot analysis

Related Products		
Product Name	**Product #**	**Size**
HSP70 ELISA Kit	ADI-EKS-700B	1x96 Wells
HSP70 High Sensitivity ELISA Kit	ADI-EKS-715	1x96 Wells

PROSTAGLANDINS AND OTHER EICOSANOIDS

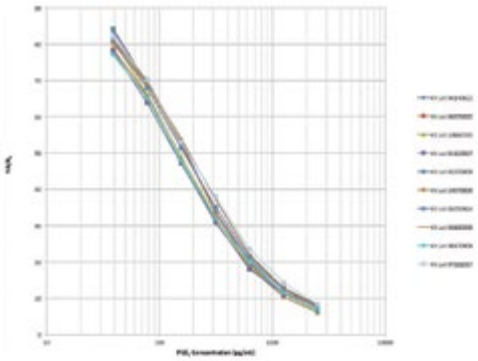
All of the sensitivity. None of the doubt.

Highest Sensitivity, Widely Cited PGE_2 ELISA Kits

For over two decades, scientists around the world have used Enzo's ELISA kits to reliably detect PGE_2 in their samples. Over that time, we have continued to improve our kits to enable PGE_2 detection with better sensitivity, flexibility, and consistency.

- Ultrasensitive ELISAs to measure as little as 8.26 pg/mL PGE_2
- Compatible with culture supernatants, serum, saliva, urine, whole blood and more
- Widely cited in peer reviewed literature for over two decades
- High-throughput assays in colorimetric, chemiluminescent, and fluorescent readouts
- Time-tested manufacturing provides consistent lot-to-lot results

Reliable Manufacturing Ensures Reproducibility



Graph demonstrating the robust and reproducible nature of PGE_2 ELISA Kits showing standard curves from ten kit lots manufactured over five years.

Prostaglandin & Eicosanoids ELISA Kits		
Product Name	**Product #**	**Size**
8-iso-$PGF_{2\alpha}$ ELISA Kit	ADI-900-010	1x96 Wells*
11-dehydro-TXB_2 ELISA Kit	ADI-900-092	1x96 Wells*
12(S)-HETE ELISA Kit	ADI-900-050	1x96 Wells*
15(S)-HETE ELISA Kit	ADI-900-051	1x96 Wells*
Cysteinyl leukotriene ELISA Kit	ADI-900-070	1x96 Wells*
Direct 8-iso-$PGF_{2\alpha}$ ELISA Kit	ADI-900-091	1x96 Wells*
LTB_4 ELISA Kit	ADI-900-068	1x96 Wells*
PGE_2 CLIA Kit	ADI-910-001	1x96 Wells*
PGE_2 ELISA Kit	ADI-900-001	1x96 Wells*
PGE_2 FPIA Kit	ADI-920-001	100 Tests
PGE_2 High Sensitivity ELISA Kit	ADI-930-001	1x96 Wells*
$PGF_{2\alpha}$ ELISA Kit	ADI-900-069	1x96 Wells*
$PGF_{2\alpha}$ High Sensitivity ELISA Kit	ADI-930-069	1x96 Wells*
TXB_2 ELISA Kit	ADI-900-002	1x96 Wells*

Prostaglandin & Eicosanoids Antibodies		
Product Name	**Product #**	**Size**
12(L)-HETE, pAb	ADI-905-053	100 µL
8-iso-$PGF_{2\alpha}$, pAb	ADI-905-015	100 µL
8-iso-$PGF_{2\alpha}$, pAb	ADI-905-016	100 µL
PGE_2, mAb (BG8)	ADI-905-628	100 µL
PGE_2, pAb	ADI-905-013	100 µL
PGE_2, pAb	ADI-905-025	1 mL
TXB_2, pAb	ADI-905-005	100 µL

*5x96 well pack size also available

Related Biochemicals		
Product Name	**Product #**	**Size**
(±)13-Azaprostanoic acid	BML-PG036	1 mg, 10 mg
12(S)-Hydroperoxyeicosa-5Z,8Z,10E,14Z-tetraenoic acid (HPETE)	BML-HP012	50 µg
Caffeic acid ethyl ester	ALX-270-480	50 mg, 250 mg
Carbethoxyhexyl imidazole	BML-EI120	10 mg, 50 mg
Carboxyheptyl imidazole	BML-EI119	10 mg, 50 mg
Cysteinyl leukotriene mixture	BML-SM105	10 µg each
Disodium cromoglycate	BML-EI121	1 g, 5 g
Eicosapentaenoic acid	BML-FA001	100 mg, 1 g
Furegrelate sodium	ALX-270-120	10 mg, 50 mg
Ketoconazole	BML-EI107	50 mg, 500 mg
L-655,240	BML-RA117	1 mg, 5 mg
Leukotriene B4 & ω oxidation metabolites mixture	BML-SM115	10 µg each
Ozagrel	BML-EI378	10 mg
Picotamide	BML-RA104	10 mg, 50 mg
Seratrodast	BML-RA119	10 mg, 50 mg
SQ-29548	BML-RA103	1 mg

APOPTOSIS & NECROSIS

GFP-CERTIFIED® Apoptosis/Necrosis Detection Kit (ENZ-51002)
GFP-compatible multiplex assay for distinguishing between healthy, early apoptotic, late apoptotic and necrotic cells.

- True multiplexing capabilities with GFP and other green fluorescent probes
- Optimized for both fluorescence microscopy and flow cytometry applications
- Suitable for death pathway analysis and drug/toxin studies

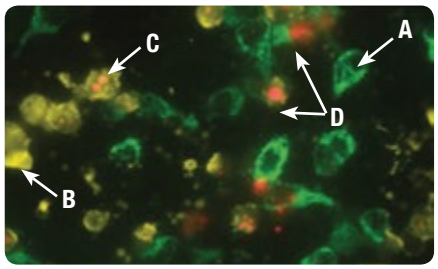
NUCLEAR-ID® Blue/Red Cell Viability Reagent (GFP-CERTIFIED®) (ENZ-53005)
A mixture of a blue fluorescent cell-permeable nucleic acid dye and a red fluorescent cell-impermeable nucleic acid dye that is suited for staining dead nuclei.

- Optimized for use in demanding imaging applications, such as confocal microscopy, flow cytometry and HCS, where consistency and reproducibility are required
- Validated for multiplexed analysis allowing for detection of inflammatory mediators and cell viability

Assay Kits			
Product Name	**Product #**	**Application**	**Size**
NUCLEAR-ID® Green Chromatin Condensation Assay	ENZ-51021		200 Assays
NUCLEAR-ID® Blue/Green Cell Viability Reagent	ENZ-53004		200 Assays
NUCLEAR-ID® Blue/Red Cell Viability Reagent	ENZ-53005		200 Assays
NUCLEAR-ID® Red/Green Cell Viability Reagent	ENZ-53006		200 Assays

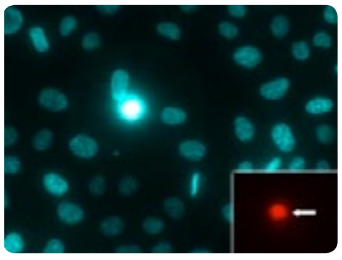
Microscopy Flow Cytometry Microplate

Detect Cell Death in GFP Expressing Cell Line



The Apoptosis Detection Reagent (Gold) and Necrosis Detection Reagent (Red) specifically detect cell state with clear spectral separation from mitochondria-associated GFP signal (Green).

Convenient GFP-Compatible Viability Dye



NUCLEAR-ID® Blue/Red dye is detected as only blue-stained nuclei in live cells and fluorescent-red nuclei in dead cells (inset, arrow).

ALLERGY & INFLAMMATION

PRO-INFLAMMATORY MARKERS

Control of pro-inflammatory molecules is critical in preventing cytotoxic effects on skin cells. Enzo provides high sensitivity ELISA kits for monitoring levels of these molecules following application of various cosmetic substances.

IL-1β (human) ELISA (ADI-900-130)

- Sensitive ELISA quantifies < 1 pg/mL
- Validated for human plasma, serum and urine
- No cross-reactivity with related cytokines
- Results from up to 42 samples in duplicate in just 4 hours
- Ready-to-use reagents and pre-coated plates to reduce errors and save time

Histamine ELISA Kit (ENZ-KIT140)

- Ultra-sensitive measurement of histamine, detecting as little as 0.03 ng/mL
- Does not require an acylation step
- Broad dynamic range suitable for a large variety of samples
- High-throughput format with results in 2 hours for up to 40 samples in duplicate

ELISA Kits		
Product Name	**Product #**	**Size**
Histamine ELISA Kit	ENZ-KIT140	1x96 Wells
IL-1β (human) ELISA Kit	ADI-900-130	1x96 Wells
IL-1β (mouse) ELISA Kit	ADI-900-132A	1x96 Wells
IL-1β (rat) ELISA Kit	ADI-900-131	1x96 Wells
IL-6 (human) ELISA Kit	ADI-900-033	1x96 Wells
IL-6 (human) ELISA Kit	ADI-901-033	5x96 Wells
IL-6 (mouse) ELISA Kit	ADI-900-045	1x96 Wells
IL-6 (human) High Sensitivity ELISA Kit	ENZ-KIT178	1x96 Wells
IL-8 (human) ELISA Kit	ADI-900-156	1x96 Wells
IL-8 (human) ELISA Kit	ADI-901-156	5x96 Wells
IL-8 (human) ELISA Kit	ADI-902-156	10x96 Wells
IL-17A (human) ELISA Kit	ADI-900-177	1x96 Wells
TIMP-1 ELISA Kit	ENZ-KIT147	1x96 Wells
TNF-α (human) ELISA Kit	ADI-900-099	1x96 Wells
TNF-α (human) ELISA Kit	ADI-901-099	5x96 Wells
TNF-α (mouse) ELISA Kit	ADI-900-047	1x96 Wells
TNF-α (rat) ELISA Kit	ADI-900-086A	1x96 Wells
TNF-R1, soluble (human) ELISA Kit	ALX-850-047	1x96 Wells
Antibodies		
Product Name	**Product #**	**Size**
IL-6 (mouse), mAb (6B4 IGH 54)	ALX-804-335	100 µg
IL-8 receptor, Type B (human), mAb (HC 2)	ALX-804-040	100 µg
IL-8 receptor, Type B (human), mAb (X2.7)	ALX-804-593	100 µg
IL-17E, mAb (68C1039.2)	ALX-804-377	100 µg
TNF receptor 2, pAb	ADI-905-593	1 mL
TNF-α (human), mAb (TNF-D)	ALX-804-199	100 µg
TNF-α, mAb (1)	ADI-CSA-806	100 µg
TNF-α, pAb	ALX-210-335	100 µg
TNF-R1 (human), mAb (H398)	ALX-804-200	100 µg
TNF-R2, mAb (80M2)	ALX-804-450	100 µg

GENOTOXICITY

DNA DAMAGE

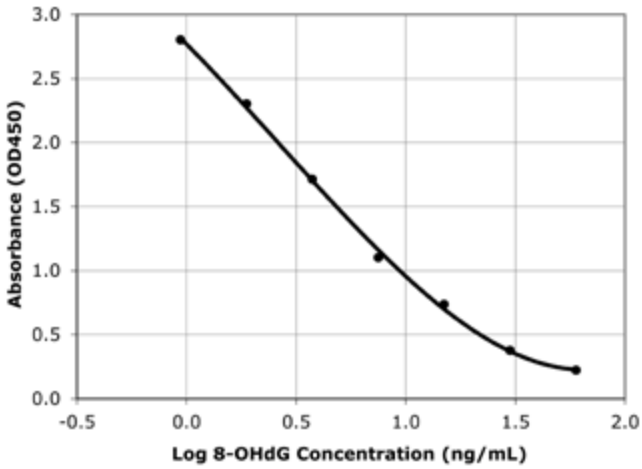
Rapidly monitor DNA destruction arising from cancer, apoptosis and oxidative stress using the DNA Damage ELISA kit

DNA Damage ELISA KIT

The DNA Damage ELISA is a fast and sensitive immunoassay providing results in less than 2.5 hours. Quantitation of 8-hydroxy-2'-deoxyguanosine (8-OHdG) in urine, serum, and saliva samples is performed in a convenient 96-well plate format using a colorimetric substrate. 8-OHdG is a frequently-used critical biomarker of oxidative stress and carcinogenesis.

- Quantify levels < 1 ng/mL
- Validated in-house in a variety of sample matrices
- Tested in a variety of biofluids (urine, serum, and saliva)
- Convenient colorimetric 96-well plate format

Typical 8-OHdG Standard Curve



The standard curve has a range of 0.94 – 60 ng/mL.

Product Name	Product #	Size
DNA Damage ELISA Kit	ADI-EKS-350	1x96 Wells

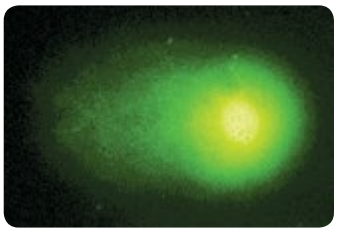
COMET SCGE ASSAY KIT

Sensitive and versatile method for measuring single- and double-strand DNA breaks in individual cells

Exposure of cells to oxidative and environmental stresses frequently results in the breakdown or oxidation of genomic DNA. Assays to evaluate the integrity of genomic DNA, or to assess the presence of oxidized DNA are frequently used as a means of verifying the onset of apoptosis or DNA damage. The Comet SCGE Assay measures DNA damage by fluorescently detecting the integrity of DNA liberated from cells embedded in low melting point agarose. Upon electrophoresis, fragmented DNA produces a characteristic "comet" shaped tail as small DNA fragments migrate in the gel more rapidly than in-tact genomic DNA.

The Comet SCGE Assay is a fast and simple electrophoresis method to detect and quantitate DNA fragmentation in cells associated with DNA damage and apoptosis. A unique nucleic acid stain provides improved sensitivity for DNA visualization compared to ethidium bromide.

- Comet Slides allow direct application of sample without pretreatment
- Shorter assay time allows for higher throughput sample analysis
- Hydrophobic barrier allows sample treatment with DNA repair enzymes
- Unique nucleic acid stain provides improved sensitivity for DNA visualization compared to ethidium bromide

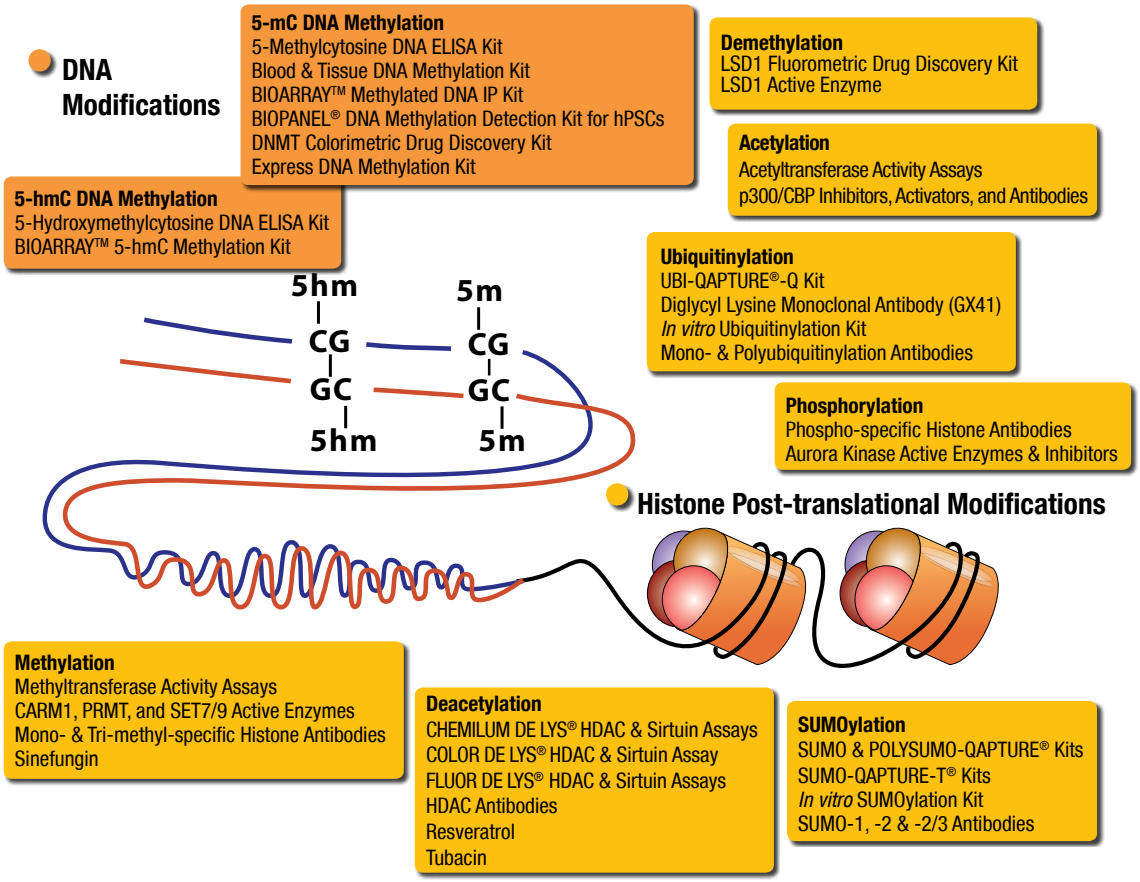


Positive control with DNA from cells treated with 100 mM H_2O_2 for 20 minutes at 4°C.

Product Name	Product #	Size
Comet SCGE Assay Kit	ADI-900-166	50 Tests

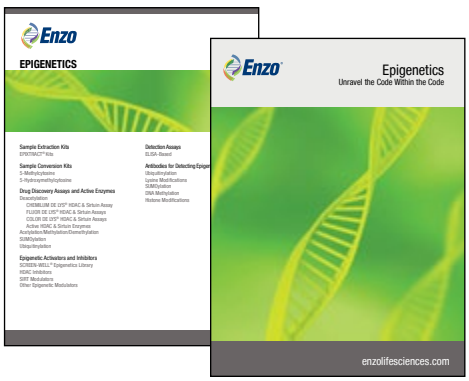
GENE DEREGULATION

Epigenetic control of skin development and regeneration is an active area of research. Diet and exposure to environmental stresses are two significant factors in determining a change in epigenetic patterns. As such, personal care researchers are targeting epigenetic mechanisms as they formulate new products for the anti-aging market. Enzo offers a complete selection of active enzymes, antibodies and sensitivity detection assays for understanding epigenetic changes involving DNA methylation and post-translational modifications.



Need more information?

Download our **EPIGENETICS** Brochures



IMMUNOHISTOCHEMISTRY FOR SKIN BIOMARKERS

Providing the Whole Assay: Retrieval to Mounting

There is no need to go anywhere else for the antibodies, ancillary reagents, or other materials you need for your IHC process. Enzo Life Sciences offers a complete set of tools to help improve the quality and efficiency of your IHC process from start to finish.

RETRIEVE
Antigen Retrieval Reagents (Tris/EDTA/Citrate)
Enzyme Antigen Retrieval Reagent

ASSAY
IHC Diluents & Wash Buffers
Blockers & Tissue Primers
HIGHDEF® AP & DAB Enhancers

DETECT
Over 1,000 IHC-validated Primary Antibodies
SAVIEW® PLUS Streptavidin Detection Kits
POLYVIEW® PLUS Mouse & Rabbit Detection Reagents

DEVELOP
HIGHDEF® Black, Blue, Brown, Red, & Yellow HRP Chromogens
HIGHDEF® Blue, Green, & Red AP Chromogens
HIGHDEF® Hematoxylin

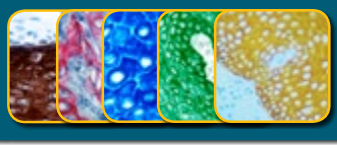
PRESERVE
HIGHDEF® Mounting Medium

MULTIPLEX

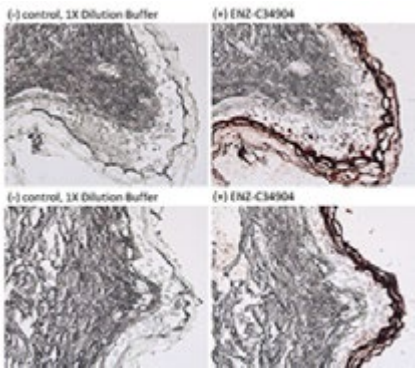
- Conserve precious samples
- Reduce reagent costs
- Convenient kit format

SINGLE COLOR

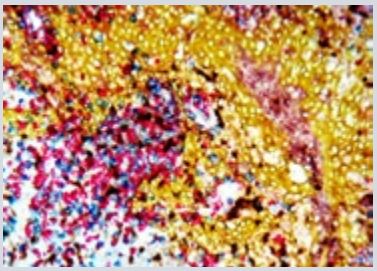
- High sensitivity, low background detection
- Vibrant, unique chromogens
- Ancillary reagents



Cytokeratin 1 (human), mAb (34βB4) (ENZ-C34904)



Immunohistochemistry analysis of human skin tissue using Cytokeratin 1 (human), mAb (34βB4) at a dilution of 1:20.

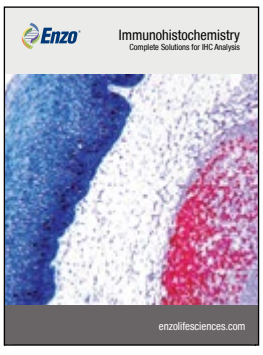


Formalin-fixed paraffin-embedded human tonsil stained with pre-diluted mouse CD68 antibody labeled with HIGHDEF® IHC chromogen substrate (DAB, HC) (ADI-950-211, brown), pre-diluted rabbit lambda light-chain antibody labeled with HIGHDEF® Blue IHC chromogen (AP) (ADI-950-150, blue), pre-diluted rabbit kappa light-chain antibody labeled with HIGHDEF® Red IHC chromogen (AP, plus) (ADI-950-141, red), high molecular weight cytokeratin labeled with HIGHDEF® Yellow IHC chromogen (HRP) (ADI-950-170, yellow), and methyl green nuclear counterstain.

- Widest panel of color choices
- Unique yellow HRP chromogen
- Increased flexibility with HRP & AP options
- High definition color development

Need more information?

Download our **IHC** Brochure



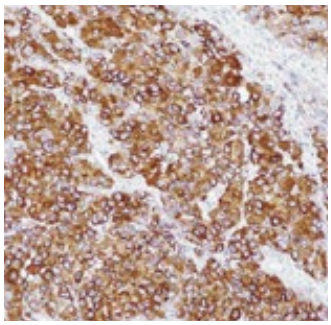
CARCINOGENESIS

IMMUNOHISTOCHEMISTRY

Our growing list of over 1,000 IHC-validated antibodies includes those for the detection of key skin cell markers, mediators of cell signaling and cell death, oxidative stress, heat shock proteins, proteasomes, and more. We know IHC optimization can be a time- and resource-consuming endeavor. You can back any of our antibodies with our Worry-Free Antibody Trial Program, even those not validated for IHC.
Visit www.enzolifesciences.com/abtrial for details.

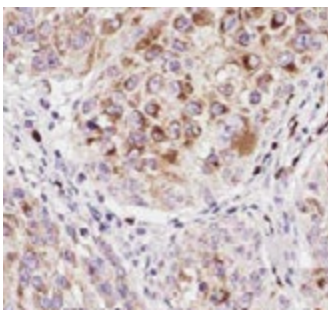
Antibodies		
Product Name	**Product #**	**Size**
Aggrecan, mAb (5C5)	ALX-803-311	100 µL
Aggrecan, mAb (5D3)	ALX-803-313	100 µL
CARMA1, pAb (AL220)	ALX-804-848	100 µg
Caspase-2, mAb (10C6)	ALX-804-356	100 µg
Caspase-3 (active), pAb	BML-SA320	100 µL
Caspase-3, mAb (31A1067)	ALX-210-806	100 µg
Caspase-3, pAb	ADI-AAP-113	50 µg, 200 µg
Caspase-7, mAb (10-1-62)	ADI-AAM-137	25 µg, 100 µg
Caspase-7, mAb (7-1-11)	ADI-AAM-127	100 µg
Caspase-9, mAb (2-22)	ADI-AAM-139	100 µg
Caspase-9, pAb	ADI-AAP-149	25 µg, 100 µg
CD44std (human), mAb (SFF-304)	ALX-801-089	100 µg
CD44var(v10) (human), mAb (VFF-14)	ALX-801-084	100 µg
CD44var(v3-v10) (human), pAb	ALX-210-234	1 mg
Collagen type I, mAb (5D8)	BPD-CSI-008-01	200 µg, 1 mg
Collagen type III, mAb (1E7-D7/Col3)	BPD-CSI-007-01	200 µg
Collagen type XII, mAb (378D5)	ALX-803-309	100 µL
Cytokeratin 1 (human), mAb (34βB4) (Ready-to-Use)	ENZ-30904	6 mL
Cytokeratin 1 (human), mAb (34βB4)	ENZ-C34904	0.5 mL
Cytokeratin 1/5/10/14 (human), mAb (34βE12)	ENZ-C34903	0.5 mL
Cytokeratin 1/5/10/14 (human), mAb (34βE12) (Ready-to-Use)	ENZ-30903	6 mL
Cytokeratin 3, mAb (AE5)	BML-CB10218	50 µg
Cytokeratin 7 (human), cAb (R17-S)	ALX-810-218	1 mL
Cytokeratin 8 (human), mAb (35βH11)	ENZ-C34902	0.5 mL
Cytokeratin 8 (human), mAb (35βH11) (Ready-to-Use)	ENZ-30902	6 mL
Glutathione Peroxidase mAb (GPX-347)	ADI-SPA-541	100 µg
Glutathione S-transferase-Pi mAb (USal-hGST-Pi-McAb-1)	ALX-804-510	100 µg
HDAC1 pAb	ALX-804-599	200 µg
HDAC2 pAb	BML-SA401	100 µg
HSP47, mAb (M16.10A1)	ADI-SPA-470	50 µg, 200 µg, 1 mg
IL-1 receptor type II (human), mAb (MNC2)	ALX-804-461	100 µg
IL-21R (ED), pAb	ADI-905-308	100 µg
IL-23 receptor, pAb	ALX-210-636	100 µg
IL-33, mAb (Nessy-1) (biotin conjugate)	ALX-804-840B	100 µg
IL-33, mAb (Nessy-1) (preservative free)	ALX-804-840PF	100 µg

MART-1 (human), cAb (A19-P)(ALX-810-217)



Formalin-fixed and paraffin-embedded human melanoma (4 µm) stained with cAb to MART-1 (human) (Prod. No. ALX-810-217) shows positive cytoplasmic immunostaining of tumor cells. Kindly performed and provided by Katarína Poliaková, MD and Lubomír Straka, MD, Ph.D. from Clinical Pathology Presov, Ltd., Presov, Slovakia.

Melanosome (human), cAb (P14-V)(A19-P) (ALX-810-216)

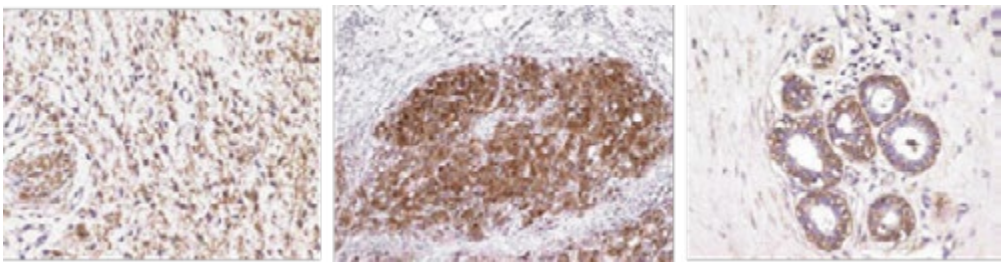


Formalin-fixed and paraffin-embedded human melanoma skin cancer tissue (4 µm) stained with cAb to melanosome (human) (Prod. No. ALX-810-216) shows specific positive immunostaining. Kindly performed and provided by Katarína Poliaková, MD and Lubomír Straka, MD, Ph.D. from Clinical Pathology Presov, Ltd., Presov, Slovakia.

Antibodies		
Product Name	**Product #**	**Size**
IL-33, mAb (Nessy-1)	ALX-804-840	100 µg
IL-8 receptor, Type B (human), mAb (HC 2)	ALX-804-040	50 µL
LOXL4 (human), pAb	ALX-215-067	100 µL, 1mL
MART-1 (human), cAb (A19-P)	ALX-810-217	6 mL
Melanoma marker (human), mAb (HMB45) (Ready-to-Use)	ENZ-30930	0.5 mL
Melanoma marker (human), mAb (HMB45)	ENZ-C34930	1 mL
Melanosome (human), cAb (P14-V)	ALX-810-216	1 mL
MMP-1, pAb	ADI-905-472	100 µg
MMP-2 (CT), pAb	BML-SA616	500 µL
MMP-9 (CT), pAb	BML-SA620	100 µg
MMP-9, pAb	ALX-210-756	50 µL
MMP-12 (hinge region), pAb	BML-SA669	50 µg
NLRP1/NALP1 (human) (CT), pAb (Bur 242)	ALX-210-018	100 µg
NLRP1/NALP1 (human) (NT), pAb (Bur 241)	ALX-804-803	100 µg
p53 DINP1 SIP, pAb	ADI-905-300	50 µg, 200 µg
p53, mAb (PAb122)	ADI-KAM-CC002	250 µg
p53, pAb	ADI-KAP-CC030	1 mL
p53, pAb	ADI-905-510	100 µg
RAIDD, pAb	ADI-905-244	500 µL
S100 (human), cAb (D28-E)	ALX-810-220	100 µL
SIRT1 (human), pAb	BML-SA427	100 µL
SIRT3 pAb	BML-SA463	100 µg
Smac/DIABLO (CT), pAb	ADI-905-684	100 µg
Smac/DIABLO (human), pAb	ALX-804-366	100 µL
Smac/DIABLO, pAb	BML-SA101	100 µL

S100 (human), cAb (D28-E)(ALX-810-220)

S100 is useful in understanding the origins of various skin tumors and in assessing the diagnosis and prognosis of a variety of skin lesions.



Formalin-fixed and paraffin-embedded human neurofibroma tissue (left; 4 µm), skin melanoma tissue (middle; 4 µm), and human breast tissue (right; 4 µm) stained with cAb to S100 (human) (Prod. No. ALX-810-220) show: Left - positive immunostaining of tumor cells and peripheral nerve; Middle - strong positive immunostaining of melanoma cells; Right - strong positive immunostaining of the outer myoepithelial cell component in mammary lobule. Kindly performed and provided by Katarína Poliaková, MD and Lubomír Straka, MD, Ph.D. from Clinical Pathology Presov, Ltd., Presov, Slovakia.

ENDOCRINE DISRUPTION

HORMONES

Rapid Identification of Endocrine Disruptors Using High-Sensitivity ELISAs

Studies indicate that environmental chemicals, such as those found in personal care products and packaging, can interfere with the production of hormones in humans and other animals. Enzo Life Sciences provides high-sensitivity ELISA kits and complementary reagents for researchers looking to assess the potential endocrine disruptive effects of substances.

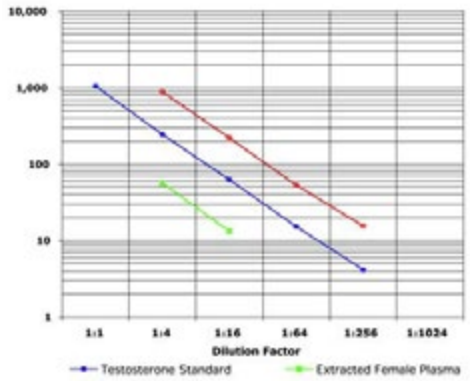
Testosterone High Sensitivity ELISA Kit (ADI-900-176)

A highly sensitive competitive immunoassay for the measurement of testosterone in human serum and plasma samples.

- Highest sensitivity ELISA on the market (3.9 – 1000 pg/mL)
- Validated for use with human samples types (plasma, serum, and urine)
- Includes stable color-coded reagents to reduce user errors

Hormone ELISA Kits		
Product Name	**Product #**	**Size**
Testosterone ELISA Kit	ADI-900-065 ADI-901-065	1x96 Wells 5x96 Wells
Testosterone High Sensitivity ELISA Kit	ADI-900-176 ADI-901-176	1x96 Wells 5x96 Wells

High Specificity Detection of Testosterone



Dose-response curves from extracted male serum and extracted female plasma diluted into assay buffer were compared to the Testosterone standard curve. The parallel response indicates that the standard effectively mimics the native protein.

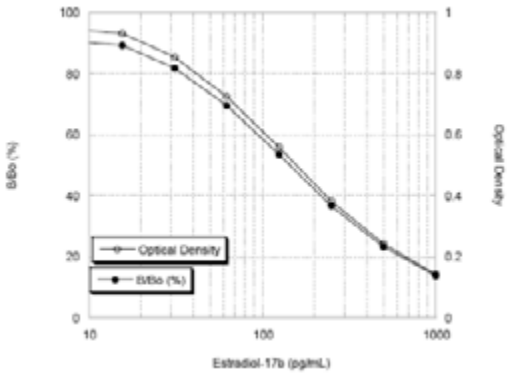
17β-Estradiol High Sensitivity ELISA Kit (ADI-900-174)

The 17β-Estradiol (serum/plasma) ELISA is a colorimetric competitive enzyme immunoassay kit for rapid detection of this analyte in human samples.

- High sensitivity — detects down to 14.0 pg/mL
- Validated for use with human samples types (plasma and serum)
- Fast, reliable results from up to 37 samples in duplicate in just 3 hours

Hormone ELISA Kits		
Product Name	**Product #**	**Size**
17β-Estradiol ELISA Kit	ADI-900-008 ADI-901-008	1x96 Wells 5x96 Wells
17β-Estradiol High Sensitivity ELISA Kit	ADI-900-174 ADI-901-174	1x96 Wells 5x96 Wells

Detect Picogram levels of 17β-Estradiol



Plot of the Percent Bound (B/B_0) versus concentration of 17β-Estradiol for the standards. The amount of signal is indirectly proportional to the amount of 17β-Estradiol in the sample.

Hormone ELISA Kits		
Product Name	**Product #**	**Size**
25(OH) Vitamin D ELISA Kit	ADI-900-215	1x96 Wells
Arg^{8}-Vasopressin ELISA Kit	ADI-900-017A ADI-901-017A	1x96 Wells 5x96 Wells
Big Endothelin-1 (human), ELISA Kit Big Endothelin-1 (rat), ELISA Kit	ADI-900-022 ADI-900-073	1x96 Wells 1x96 Wells
Corticosterone ELISA Kit	ADI-900-097 ADI-901-097	1x96 Wells 5x96 Wells
Cortisol ELISA Kit	ADI-900-071 ADI-901-071	1x96 Wells 5x96 Wells
DHEA ELISA Kit	ADI-900-093 ADI-901-093	1x96 Wells 5x96 Wells
Endothelin-1 ELISA Kit	ADI-900-020A	1x96 Wells
Estriol ELISA Kit	ADI-900-100	1x96 Wells
Gastrin I (human), ELISA Kit Gastrin I (rat), ELISA Kit	ADI-900-026 ADI-900-149	1x96 Wells 1x96 Wells
Leptin (human), ELISA Kit Leptin (mouse), ELISA Kit	ADI-900-028A ADI-900-019A	1x96 Wells 1x96 Wells
Leptin (rat), ELISA Kit	ADI-900-015A	1x96 Wells
Oxytocin ELISA Kit	ADI-900-153A ADI-901-153A	1x96 Wells 5x96 Wells
Progesterone ELISA Kit	ADI-900-011 ADI-901-011	1x96 Wells 5x96 Wells
Serotonin ELISA Kit	ADI-900-175	1x96 Wells
Substance P ELISA Kit	ADI-900-018 ADI-901-018	1x96 Wells 5x96 Wells

ENDOCRINE DISRUPTION

Hormone Antibodies		
Product Name	**Product #**	**Size**
[pTyr^{1150}/Tyr^{1151}]Insulin receptor, mAb (10C3)	ADI-905-645	100 µg
[pTyr$^{1158/1162/1163}$]Insulin receptor and [pTyr$^{1131/1135/1136}$]IGF-1 Receptor, pAb	BML-SA392	20 µL
[pTyr^{1322}]Insulin receptor, mAb (21G12)	ADI-905-646	100 µg
Angiotensin II receptor AT1, pAb	ADI-905-743	100 µg
Angiotensin II receptor AT1, pAb (DY-682 conjµgate)	ADI-905-813	100 µg
Angiotensin II receptor AT1, pAb (DY-800 conjµgate)	ADI-905-814	100 µg
Angiotensin II receptor AT2, pAb	ADI-905-746	100 µg
Angiotensin II receptor AT2, pAb (DY-682 conjµgate)	ADI-905-815	100 µg
AT1 receptor (extracellular), pAb	BML-SA608	50 µL
AT2 receptor (extracellular), pAb	BML-SA609	50 µL
Atrial natriuretic peptide, mAb (23/1)	BML-AA6244	100 µL
Atrial natriuretic peptide, pAb	BML-AA1105	25 µL
Brain natriuretic peptide, pAb	BML-BA1117	25 µL
Calcitonin gene related peptide, mAb (CD8)	BML-CA1135	25 µL
Calcitonin gene related peptide, pAb	BML-CA1134	25 µL
Calcitonin gene related peptide, pAb	BML-CA1137	25 µL
Endothelin A receptor, pAb	ALX-210-507A	250 µg
Endothelin B receptor, pAb	ALX-210-506A	250 µg
Endothelin receptor A (rat), pAb	BML-SA576	50 µL
Endothelin receptor B (rat), pAb	BML-SA577	50 µL
Endothelin receptor ETA, pAb	ADI-905-790	100 µg
Endothelin receptor ETB, pAb	ADI-905-791	100 µg
Endothelin-1, mAb (TR.ET.48.5)	ALX-803-001	100 µL
Estrogen receptor α, mAb (33)	ALX-803-004	50 µg
Estrogen receptor α, mAb (C-542)	ADI-SRA-1010	50 µg
Estrogen receptor α, pAb	ALX-210-201	50 µg
Estrogen receptor β, pAb	ALX-210-132	100 µg
Estrogen receptor β, pAb	ALX-210-135	50 µg
Estrogen receptor β, pAb	ALX-210-178	50 µg
Estrogen receptor β, pAb	ALX-210-180	50 µg
Estrogen receptor, mAb (h-151)	ADI-SRA-1000	50 µg
Galanin, pAb	BML-GA1161	25 µL
Gastrin releasing peptide, pAb	BML-GA1166	25 µL
Gastrin, pAb	BML-GA1167	25 µL
Ghrelin (human), mAb (45)	BPD-ABS-050-45	200 µg
Ghrelin receptor GHS-R, pAb	ADI-905-792	100 µg
Ghrelin, mAb (121)	BPD-ABS-052-121	200 µg
Ghrelin, mAb (121) (biotin conjµgate)	BPD-ABS-052-121B	50 µg
Glucagon like peptide 1, pAb	BML-GA1176	25 µL
Glucagon like peptide 2, pAb	BML-GA1179	25 µL

Hormone Antibodies		
Product Name	**Product #**	**Size**
Glucagon, mAb (08)	BPD-ABS-058-08	200 µg
Glucagon, mAb (08) (biotin conjµgate)	BPD-ABS-058-08B	50 µg
Glucagon, mAb (09)	BPD-ABS-061-09	200 µg
Glucagon, pAb	BML-GA1181	25 µL
Glucocorticoid receptor a, pAb	ALX-210-277	50 µg
Glucocorticoid receptor b (human), pAb	ALX-210-154	50 µL
Glucocorticoid receptor, mAb (BugR2)	ALX-803-006	100 µg
Glucose-dependent insuLinotropic peptide, pAb	BML-GA1173	25 µL
Gonadotropin releasing hormone, mAb (BML)	BML-GZ1092	25 µL
Gonadotropin releasing hormone, pAb	BML-GZ1110	25 µL
Insulin receptor b subunit, mAb (CT-3)	BML-SA432	100 µg
Insulin receptor b, mAb (C18C4)	ADI-905-683	100 µg
Insulin receptor, mAb (9H4)	ADI-905-647	100 µg
Leptin receptor, pAb	ALX-210-168	100 µL
Leptin, pAb	ALX-210-105	50 µL
Leptin, pAb	BML-SA268	100 µg
Nesfatin-1, mAb (Nesfaty-1)	ALX-804-854	100 µg
Nesfatin-1, pAb (AT120)	ALX-210-944	100 µg
Orexin receptor 1, pAb	BML-SA646	50 µL
Orexin receptor 2, pAb	BML-SA647	50 µL
Progesterone receptor, mAb (aPR6)	ALX-803-010	100 µg
Progesterone, mAb (111.2C7.3)	ADI-905-010	100 µL
Prolactin receptor (rat), mAb (T6)	ALX-803-003	100 µg
Prolactin receptor, mAb (U5)	ALX-803-005	100 µg
Serotonin receptor 5HT1A pAb	ADI-905-741	100 µg
Serotonin, pAb	BML-SZ1011	25 µL
Serotonin, pAb	BML-SZ1021	100 µL
Somatostatin 28, pAb	BML-SA1268	100 µL
Somatostatin receptor type 3, pAb	BML-SA593	50 µL
Somatostatin receptor type 4 (rat), pAb	BML-SA594	200 µL
Somatostatin, pAb	BML-SZ1114	100 µL
Somatostatin, pAb	BML-SZ1116	25 µL
Substance P, pAb	BML-SA1270	25 µL
Substance P, pAb	BML-SZ1062	100 µL
Thyroid Peroxidase (human), mAb (TPO 47)	ALX-BC-6010-S	1 mL
Viable rat beta cells and RIN cells, mAb (K14D10)	ALX-803-052	100 µg
Vitamin D3 receptor, mAb (9A7)	ALX-804-021	100 µg
WIPI-1 (human), pAb (AT129)	ALX-210-954	50 µg
WIPI-1, pAb (AT130)	ALX-210-955	100 µg

ENDOCRINE DISRUPTION

BIOCHEMICALS

Biochemicals		
Product Name	**Product #**	**Size**
(R,S)-Equol	ALX-385-032	5 mg, 25 mg
(Z)-4-Hydroxytamoxifen	ALX-550-361	1 mg, 5 mg
1α,25-Dihydroxyvitamin D3	BML-DM200	50 µg, 1 mg
2-[1-(4-Piperonyl)piperazinyl]benzothiazole	ALX-550-171	5 mg
20-Hydroxyecdysone	ALX-370-012	5 mg, 10 mg, 50 mg
24(R),25-Dihydroxyvitamin D3	BML-DM300	50 µg
25-Hydroxyvitamin D2	BML-DM101	1 mg
25-Hydroxyvitamin D3	BML-DM100	1 mg, 5 mg
2-Methoxyestradiol	BML-S540	10 mg, 50 mg
6α-Fluorotestosterone	BML-S250	5 mg, 25 mg
8-Isopentenylnaringenin	ALX-385-025	5 mg
Alfacalcidol	ALX-460-036	1 mg
Bicalutamide	ALX-270-476	100 mg, 500 mg, 1 g
Compound A	ALX-550-516	5 mg
Corticosterone	ALX-370-007	50 mg
Coumestrol	BML-S180	5 mg, 25 mg
Dihydroergocristine . mesylate	BML-NS108	200 mg, 1 g
DPN	BML-GR248	10 mg, 50 mg
Ferutinin (high purity)	ALX-350-098	1 mg, 5 mg, 10 mg
Finasteride	ALX-270-491	100 mg, 500 mg
Formononetin (high purity)	ALX-270-312	5 mg
HSD Inhibitor 23	ALX-270-474	1 mg
Isoxanthohumol	ALX-350-279	1 mg
Makisterone A	ALX-370-013	1 mg
Megestrol acetate	BML-S515	1 g
Melengestrol acetate	BML-S520	200 mg, 1 g
Mifepristone	BML-S510	25 mg, 100 mg
ORG-12962	BML-NS705	10 mg, 50 mg
Ponasterone A	ALX-370-014	5 mg
Raloxifene . HCl	BML-GR243	50 mg, 500 mg
Tamoxifen . citrate	ALX-550-095	1 g
Vitamin D2	ALX-460-025	1 g
Vitamin D3	ALX-460-026	1 g, 5 g
WAY-200070	BML-GR247	10 mg, 50 mg

PIGMENTATION

Sensitive Detection for Modulators of Pigmentation

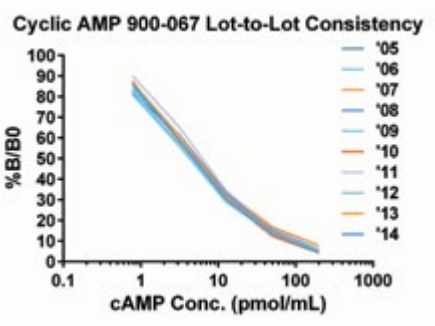
Binding of Melanocyte-Stimulating Hormone (MSH) to the melanocortin 1 receptor (MC1R, a G protein-coupled receptor) on melanocytes triggers pro-differentiation signals mediated by the second messenger cyclic AMP (cAMP). cAMP-mediated signals inhibit UV-induced apoptosis and promote melanin synthesis via transcriptional activation of pigment-regulating enzymes such as tyrosinase. Modulation of cAMP levels by pharmacological induction of adenylate cyclases, or inhibition of phosphodiesterases, hold promise as UV-independent mechanisms of increasing natural production of melanin and protection from UV damage to skin.

Cyclic Nucleotide Analysis

Enzo Life Sciences offers the most sensitive and complete colorimetric ELISA kits for quantification of intracellular and/or extracellular cAMP or cGMP in a variety of sample types.

- Sensitive ELISA with optional acetylation protocol increases sensitivity 10-fold (0.039 pmol/mL)
- Regularly cited in peer-reviewed publications
- Simple, efficient and well-established sample handling protocols
- Reliable manufacturing yields consistent lot-to-lot performance

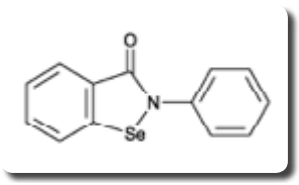
Measure cAMP, a Regulator of Melanin Synthesis



Graph demonstrates the robust and reproducible nature of the competitive cAMP ELISA kit (Prod. #ADI-900-067) showing standard curves from 10 lots manufactured over 6 years.

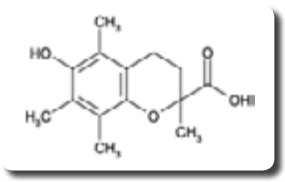
Related Products		
Product Name	**Product #**	**Size**
cAMP Complete ELISA Kit	ADI-900-163	1x96 Wells
cAMP Direct ELISA Kit	ADI-900-066	1x96 Wells
cAMP ELISA Kit	ADI-900-067	1x96 Wells
Catalase Fluorometric Detection Kit	ADI-907-027	500 Tests
PKA Kinase Activity Kit	ADI-EKS-390A	1x96 Wells
RO-20-1724	BML-EI117	100 mg, 1 g
Rolipram	BML-PD175	10 mg, 50 mg
R-(-)-Rolipram	BML-PD177	5 mg
SQ 20009	BML-PD130	5 mg, 25 mg
S-(+)-Rolipram	BML-PD178	5 mg
Zardaverine	BML-PD195	5 mg, 25 mg
PDE4A (catalytic domain) (human), recombinant	BML-SE521	20 µg
PDE4B2 (catalytic domain) (human), recombinant	BML-SE522	20 µg
PDE4D (catalytic domain) (human), recombinant	BML-SE523	20 µg

Ebselen (ALX-270-097) - 5 mg, 25 mg



Recent findings suggest that ebselen functions as a depigmenting compound by inhibiting melanin synthesis and melanosome transfer to keratinocytes. Purity: ≥ 98% (NMR)

Trolox® (ALX-270-267) - 100 mg



This cell-permeable vitamin E derivative decreases post-inflammatory hyperpigmentation after injury through anti-inflammatory action. Purity: ≥ 97%

SAFETY AND TOXICITY TESTING

CYTOTOXICITY

Whole Cell Analysis of Cytotoxic Compounds

Toxicity assessment determines whether a drug or compound induces inflammatory or cytotoxic processes such as apoptosis, cell proliferation, and oxidative stress. Enzo offers a diverse collection of assays for analysis of cell viability and cytotoxicity.

MITO-ID® Membrane Potential Cytotoxicity Assay Kit (ENZ-51019)

A real-time mitochondrial membrane potential assay with superior sensitivity

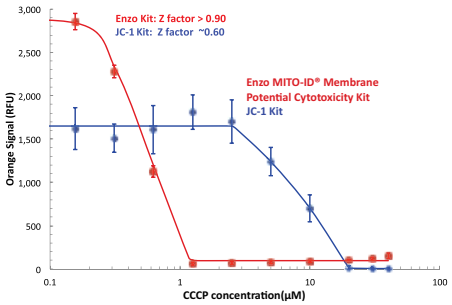
- 10x more sensitive than JC-1 with superior aqueous solubility
- Photostable dual-emission dye
- No-wash/no-medium removal
- Separate MITO-ID® Red/Green assays available for detection of mitochondrial mass
- Suitable for high-throughput applications

LYSO-ID® Red Cytotoxicity Kit (ENZ-51015)

A rapid, quantitative live cell cytotoxicity assay compatible with high-throughput screening (HTS)

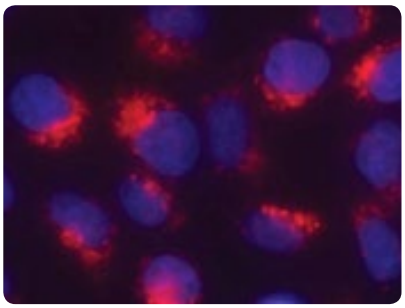
- LYSO-ID® dye rapidly partitions into cells and labels acidic organelles
- Only commercial assay available that allows for long-term cell monitoring of cytotoxic effects
- Multi-well, HTS-compatible assay with rapid 10-15 minute dye incubation

High-throughput Analysis of Mitotoxicity



Detect mitochondrial perturbations with 10 times more sensitivity than JC-1.

Monitor Dysfunction of Lysosomal Degradation



Drug-induced lysosome accumulation in U-2 OS cells was evaluated using Verapamil (200 µM) and LYSO-ID® Red dye.

Assay Kits		
Product Name	**Product #**	**Application**
CYTO-ID® Autophagy Detection Kit	ENZ-51031	
GFP-CERTIFIED® Apoptosis/Necrosis Detection Kit	ENZ-51002	
LDH Cytotoxicity WST Assay	ENZ-KIT157	
LYSO-ID® Red Cytotoxicity Assay	ENZ-51015	
MITO-ID® Membrane Potential Cytotoxicity Assay	ENZ-51019	
MITO-ID® Membrane Potential Detection Kit	ENZ-51018	
NUCLEAR-ID® Green Chromatin Condensation Assay	ENZ-51021	
NUCLEAR-ID® Blue/Green Cell Viability Reagent	ENZ-53004	
NUCLEAR-ID® Blue/Red Cell Viability Reagent	ENZ-53005	
NUCLEAR-ID® Red/Green Cell Viability Reagent	ENZ-53006	

Microscopy Flow Cytometry Microplate

NATURAL PRODUCTS AND COMPOUND SCREENING

Natural products are an unsurpassed source of chemical diversity for pharmaceutical, cosmetics, nutraceutical screening, and research. Historically, these compounds have been the most successful source of new drugs.

SCREEN-WELL® Natural Product Library (BML-2865)

A collection of over 500 compounds of known structure in a ready-to-screen format, featuring:

- More than 500 compounds supplied in DMSO at 2.0 mg/mL
- Available in 100 µL and 500 µL sizes
- Individual compounds or custom subsets also available

Compound Libraries		
Product Name	**Product #**	**Size**
Autophagy Library	BML-2837	100 µL, 500 µL
Bioactive Lipid Library	BML-2800	100 µL, 500 µL
Epigenetics Library	BML-2836	100 µL, 500 µL
Fatty Acid Library	BML-2803	100 µL, 500 µL
FDA Approved Library	BML-2843	100 µL
ICCB Known Bioactives Library	BML-2840	100 µL
Ion Channel Library	BML-2805	500 µL
Natural Products Library	BML-2865	100 µL, 500 µL
Protease Inhibitor Library	BML-2833	100 µL, 500 µL
REDOX Library	BML-2835	100 µL, 500 µL

Polyphenols & Related Compounds		
Product Name	**Product #**	**Size**
Delphinidin chloride (high purity)	ALX-385-028	10 mg
EGCG	ALX-270-263	10 mg, 50 mg
Genistein (synthetic)	ALX-350-006	10 mg, 25 mg, 50 mg, 100 mg, 1 g
Hydroxytyrosol	ALX-350-404	10 mg, 50 mg, 250 mg
Myricetin	ALX-385-012	10 mg, 50 mg
Quercetin	ALX-385-001	5 g, 25 g
Resveratrol	BML-FR104	100 mg, 500 mg

Antioxidants		
Product Name	**Product #**	**Size**
Retinoic Acid, all trans	BML-GR100	500 mg, 5 g
Rosmarinic Acid	ALX-270-253	10 mg, 50 mg
Ubiquinone-10/Coenzyme Q	ALX-270-295	2 mg
Vitamin E/DL-α-Tocopherol (high purity)	ALX-460-018	1 g

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