Assay Kits
Flexible Formats for Biomarker Detection, Cell Analysis, and Enzyme Activity
Assay kits can be convenient time-saving tools to help accelerate your research, but not all assays are created equal. Some that promise convenience fail to deliver biologically relevant sensitivity, or the reproducibility needed for long-term studies, which can ultimately cost you more time and money. Whether you use ELISA kits for biomarker detection, assess cellular function with fluorescent assays, or screen enzyme modulators with activity assays, every Enzo assay kit offers something a lot of other companies out there today do not—Experience.

It takes more than just an antibody pair to make an ELISA. Building an immunoassay requires screening multiple antibodies, selecting appropriate standards and conjugates, establishing proper sample prep protocols, and validating the assay in relevant matrices. Our expertise in developing ELISAs is further backed by four decades of manufacturing excellence. Strict validation criteria and state-of-the-art manufacturing facilities deliver reproducible assays that continue to be cited in peer-reviewed publications by scientists around the world.

ELISA Kits
- Competitive and immunometric formats
- Multi-plate packs available
- Color-coded reagents reduce user error

CELLESTIAL® Assays
- Novel assays for autophagy, aggregation, and multi-drug resistance
- Increased photostability and permeability
- Multiplex-compatible (GFP-CERTIFIED®) assays

Enzyme Activity Assays
- High-purity, high-activity control enzymes
- Novel substrate/developer chemistry
- Reduce interference from candidate compounds

The graph above demonstrates the robust and reproducible nature of the competitive cAMP ELISA Kit (ADI-900-067), showing standard curves from 10 kit lots manufactured over 10 years.

Reliable Manufacturing Ensures Consistent Results

Immunoassay Kits
Our catalog of nearly 300 ELISA kits includes sensitive, specific assays for relevant markers of cell viability, signaling pathways, steroid and peptide hormones, inflammation, and more. In addition to traditional antibody pair based immunometric assays, our scientists specialize in the particularly challenging production of high-sensitivity competitive ELISAs for detection of small molecules. With 40 years of assay development experience and state-of-the-art manufacturing facilities, Enzo ensures time-tested reproducibility.

Cell-Based Assays
Our CELLESTIAL® portfolio of fluorescent probes and assay kits for cellular analysis provides a complete set of tools for monitoring cell viability, proliferation, death, oxidative stress and toxicity. Our dye-based assays have been optimized for the most demanding imaging applications including confocal microscopy, wide-field fluorescence microscopy, flow cytometry, and high content screening, where consistency and reproducibility are essential.

Enzyme Activity Assays
Whether you are performing large-scale screens, or studying specific enzyme kinetics, our high activity enzymes, unique substrates, and convenient kits are designed to deliver high-quality hits.
Enzo Life Sciences offers a large variety of immunoassay kits in both immunometric and competitive assay formats. As scientists and manufacturers of kits, we understand the critical nature of your research. Each kit is put through rigorous testing to ensure high precision, accuracy, sensitivity, and specificity. You can be confident that you will obtain reproducible results, day-after-day and lot-after-lot.

**Consistent** – strict quality control guidelines ensure reproducible results, lot-after-lot  
**Trusted** – reliability highlighted in peer-reviewed publications for three decades  
**Flexible** – adaptable to automated equipment for high-throughput systems

**Cyclic Nucleotides**
The most sensitive colorimetric ELISA kits for detection of cAMP and cGMP, key second messenger signaling molecules.
- Cyclic AMP Complete
- Cyclic GMP Complete
- Cyclic AMP Direct (Intracellular)
- Cyclic GMP Direct (Intracellular)
- Cyclic AMP (Extracellular)
- Cyclic GMP (Extracellular)

**Hormones**
Sensitive assays for steroid and peptide hormones that regulate stress, reproduction, metabolism, cardiovascular physiology, and more.
- Peptide
  - Angiotensin
  - Bradykinin
  - Enkephalin
  - GABA
  - GLP-1
  - Insulin
  - UV-Hemorphin
- Steroid
  - Aldosterone
  - Corticosterone
  - Cortisol
  - DHEA
  - DHEA-S
  - DHEA-Sulfate
  - Estradiol
  - Estriol
  - 17β-Estradiol
  - 24(S) Hydroxycholesterol
  - FSH
  - LH
  - Melatonin
  - Progesterone
  - Testosterone
- Monoamine
  - Serotonin
  - 5-HT
  - norepinephrine
  - NE
  - Epinephrine
- Peptide
  - Angiotensin
  - Bradykinin
  - Endothelin-1
  - Histamine
  - Histamine
- Steroid
  - Aldosterone
  - Corticosterone
  - Cortisol
  - DHEA
  - DHEA-S
  - DHEA-Sulfate
  - Estradiol
  - Estriol
  - 17β-Estradiol
  - 24(S) Hydroxycholesterol
  - FSH
  - LH
  - Melatonin
  - Progesterone
  - Testosterone
  - 5-HT
  - norepinephrine
  - NE
  - Epinephrine

**Heat Shock & Oxidative Stress**
The definitive collection of ELISA kits for heat shock and oxidative stress.
- α-B-Crystallin
- HSP25/27
- HSP40
- HSP60
- HSP70 & HSP70 High Sensitivity
- HSP90
- Grp75
- Grp78
- Grp94
- Heme Oxygenase-1
- DNA Damage (8-OHdG)
- Nitric Oxide

**Toxicology**
Biomarker detection for assessing response to toxic compounds.
- NGAL
- KIM-1

**Bioprocess**
Sensitive ELISA kits for biotherapeutic characterization and residual contaminant detection.
- PEGylated Protein
- Protein A ELISA Kit
- CHO HCP
- E. coli HCP

**Neuroscience**
High-specificity, sensitive assays for biomarkers of neurodegeneration and signaling.
- 24(S) Hydroxycholesterol
- Serotonin
- Survival Motor Neuron (SMN1)

**Programmed Cell Death**
Quantify critical cell death pathway proteins. The perfect complement to our CELLESTIAL® cell-based assays.
- Apoptosis
  - Bax
  - Bcl-2
  - Cytochrome C
  - p53/MDM2
  - Survivin
  - XIAP

**Immunology**
Broad portfolio of sensitive, high-specificity ELISA kits for inflammation and immunological studies.
- Adiponectin
- ANGPTL
- CD40/CD40L
- CRP
- Cysteinyl Leukotrienes
- Fas
- 12(S) HETE
- 15(S) HETE
- Histamine
- 13(S) HODE
- IFN-γ
- IL-1β
- IL-2
- IL-4
- IL-5
- IL-6
- IL-8
- IL-10
- IL-12p70
- IL-13
- IL-17A

**Product Name** | **Product #** | **Product Name** | **Product #** |
--- | --- | --- | --- |
24(S) Hydroxycholesterol ELISA Kit | ADI-900-210 | HSP70 High Sensitivity ELISA Kit | ADI-EKS-715 |
25(OH) Vitamin D ELISA Kit | ADI-900-215 | HSP90α (human) ELISA Kit | ADI-EKS-895 |
cAMP Complete ELISA Kit | ADI-900-163 | MBL Oligomer ELISA Kit | BPD-KIT-029 |
cGMP Complete ELISA Kit | ADI-900-164 | NGAL (human) ELISA Kit | BPD-KIT-036 |
Corticosterone ELISA Kit | ADI-900-097 | Oxytocin ELISA Kit | ADI-900-153 |
Cortisol ELISA Kit | ADI-900-071 | PGE2 ELISA Kit | ADI-900-001 |
Dkk-1 (human) ELISA Kit | ADI-900-151 | PGE2 High Sensitivity ELISA Kit | ADI-930-001 |
DNA Damage ELISA Kit | ADI-EKS-350 | Protein A ELISA Kit | ADI-900-057 |
Endothelin-1 ELISA Kit | ADI-900-020A | Serotonin ELISA Kit | ADI-900-175 |
HO-1 (human) ELISA Kit | ADI-EKS-800 | SMN ELISA Kit | ADI-900-209 |
HSP70 ELISA Kit | ADI-EKS-700B | Testosterone ELISA Kit | ADI-900-065 |

† Multi-plate pack size also available
Our panel of CELLESTIAL® fluorescence-based live cell assays is built upon our extensive expertise in the design and synthesis of fluorescent probes. From simple organelle-specific dyes for imaging cell structure and determining cell viability, to more complex dyes for evaluating cell signaling and death pathways, each of our probes is developed to provide sensitivity, specificity, and convenience.

**Convenient** – Increased photostability reduces photobleaching

**Specific** – Reduce false positives by eliminating non-specific dye-associated artifacts

**Flexible** – Compatible with common dyes and fluorescent markers (i.e., GFP) for multiplex analysis

**Consistent** – Optimized for reproducibility on microplate, flow cytometry, or fluorescent microscopy platforms

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Product #</th>
<th>MP</th>
<th>Flow</th>
<th>Microscopy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apoptosis/Necrosis Detection Kit</td>
<td>ENZ-51002</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cellular Senescence Live Cell Analysis Kit</td>
<td>ENZ-KIT130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CYTO-ID® Autophagy Detection Kits</td>
<td>ENZ-51031, KIT175</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLUOFORTE® Calcium Assay Kit</td>
<td>ENZ-51016, 51017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LYSO-ID® Red Detection Kit</td>
<td>ENZ-51015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MITO-ID® Extracellular O₂ Sensor Kit</td>
<td>ENZ-51034, 51045</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MITO-ID® Extracellular pH Sensor Probe</td>
<td>ENZ-51018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MITO-ID® Membrane Potential Cytotoxicity Kit</td>
<td>ENZ-51019</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MITO-ID® Membrane Potential Detection Kit</td>
<td>ENZ-51035</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROTEOSTAT® Aggresome Detection Kit</td>
<td>ENZ-51036</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROS-ID™ Hypoxia/Oxidative Stress Detection Kit</td>
<td>ENZ-51042</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROS-ID™ Total ROS Detection Kit</td>
<td>ENZ-51011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROS-ID™ Total ROS/Superoxide Detection Kit</td>
<td>ENZ-51010</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FEATURED CELLESTIAL® ASSAY KITS**

**Better enzymes, better assays, more high-quality hits**
SCREENENZYME MODULATORSWITH INNOVATIVE ACTIVITY ASSAYS

Our decades of experience in the design and manufacture of active enzymes and their substrates support the development of an ever-expanding portfolio of biochemical assays. Our menu of scalable enzyme activity assays is anchored by our FLUOR DE LYS® deacetylase assay platform, featuring kits for screening modulators of HDAC and Sirtuin activity. We also offer FRET-based assays for matrix metalloproteinases (MMPs) and caspase activity, as well as phospho-specific antibody-based kinase assays. These assays exemplify the synergy of Enzo capabilities, assembling small peptide, active recombinant protein synthesis, fluorescent labeling and detection technologies, and antibody development into robust, reproducible assay kits.

Quality – High-activity, high-purity recombinant enzymes for high-quality hits
Flexibility – Bulk enzymes and substrates available for post-screening studies
Innovation – Patented substrate/developer chemistries in a variety of readout formats

CONVENIENT SCREENING FORMATS FROM THE PIONEER IN NON-RADIOACTIVE HDAC & SIRTUIN ASSAYS

The FLUOR DE LYS® deacetylase assay platform revolutionized detection of HDAC & Sirtuin enzyme activity when it was introduced over a decade ago. Today, it continues as the gold standard in drug discovery research and target validation. FLUOR DE LYS® has freed researchers from cumbersome protocols required by radiolabeled or other modified histone-based methods. Our high-quality assays utilize patented substrate/developer chemistry in combination with high-activity, high-purity enzymes, to deliver more high-quality hits. Broad-class HDAC/Sirtuin screening assays are available in chemiluminescent, fluorescent, and colorimetric formats.

Choose A Format to Fit Your Needs

<table>
<thead>
<tr>
<th>Format</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLUOR DE LYS®</td>
<td>Robust fluorescent screening assays</td>
</tr>
<tr>
<td>COLOR DE LYS®</td>
<td>Option for standard absorbance plate readers</td>
</tr>
<tr>
<td>CHEMILUM DE LYS®</td>
<td>Ideal for cross-validation of fluorescent assays</td>
</tr>
</tbody>
</table>

Modified Substrate-Based Format

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Product #</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMILUM DE LYS® HDAC/SIRT Drug Discovery Kit</td>
<td>BML-AK532</td>
</tr>
<tr>
<td>FLUOR DE LYS® HDAC &amp; HDAC Green Assay Kits</td>
<td>BML-AK500</td>
</tr>
<tr>
<td>COLOR DE LYS® HDAC Activity Assay Kit</td>
<td>BML-AK499</td>
</tr>
<tr>
<td>FLUOR DE LYS® HDAC1/2/3/6/8 Specific Assay Kits</td>
<td>BML-AK530</td>
</tr>
<tr>
<td>FLUOR DE LYS® SIRT 1/2/3/5 Assay Kits</td>
<td>BML-AK520</td>
</tr>
<tr>
<td>Acetyltransferase &amp; Methyltransferase Assay Kits</td>
<td>BML-AK510</td>
</tr>
</tbody>
</table>

Antibody-Based Format

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Product #</th>
</tr>
</thead>
<tbody>
<tr>
<td>PKA, Akt &amp; PKC Activity Assay Kits</td>
<td>BML-AK510</td>
</tr>
</tbody>
</table>

Acetyltransferase & Methyltransferase Assay Kits

Featuredbytheirhigh-qualityhitsandreproducibility,theseassaysareidealforhigh-throughputscreeningandtargetvalidation.

FEATURED ENZYME ACTIVITY ASSAYS

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Product #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetyltransferase Activity Kit</td>
<td>ADI-907-026</td>
</tr>
<tr>
<td>Calcineurin Phosphatase Assay Kit</td>
<td>BML-AK804</td>
</tr>
<tr>
<td>DPPIV Drug Discovery Kit</td>
<td>BML-AK499</td>
</tr>
<tr>
<td>CHEMILUM DE LYS® HDAC/SIRT Chemiluminescent Drug Discovery Kit</td>
<td>BML-AK532</td>
</tr>
<tr>
<td>FLUOR DE LYS® HDAC Fluorometric Activity Assay Kit</td>
<td>BML-AK500</td>
</tr>
<tr>
<td>FLUOR DE LYS® Green HDAC Fluorometric Activity Kit</td>
<td>BML-AK530</td>
</tr>
<tr>
<td>FLUOR DE LYS® SIRT1 Fluorometric Drug Discovery Kit</td>
<td>BML-AK555</td>
</tr>
<tr>
<td>MMP-1 Colorimetric Drug Discovery Kit</td>
<td>BML-AK404</td>
</tr>
<tr>
<td>MMP-9 Colorimetric Drug Discovery Kit</td>
<td>BML-AK410</td>
</tr>
<tr>
<td>PKA Kinase Activity Kit</td>
<td>ADI-EKS-390A</td>
</tr>
<tr>
<td>PKC Kinase Activity Kit</td>
<td>ADI-EKS-420A</td>
</tr>
<tr>
<td>Akt Kinase Activity Kit</td>
<td>ADI-EKS-400A</td>
</tr>
</tbody>
</table>

Visitwww.enzolifesciences.comformoreinformationsandpurchasemorescreeningkits.
You may also be interested in:

Global Headquarters
ENZO LIFE SCIENCES, INC.
10 Executive Blvd.
Farmingdale, NY 11735
Ph: 800.942.0430
Fax: 631.694.7501
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Industriestrasse 17
CH-4415 Lausen, Switzerland
Ph: +41 61 926 8989
Fax: +41 61 926 8979
info-eu@enzolifesciences.com

LOCAL EUROPEAN OFFICES

Belgium & Luxembourg
Enzo Life Sciences BVBA
Avenue Louise 65/Box 11
1050 Bruxelles
Belgium
Ph: +32 3 466 0420
Fax: +32 3 808 7033
info-be@enzolifesciences.com

France
Enzo Life Sciences (ELS) AG
Branch Office Lyon
13, avenue Albert Einstein,
F-69100 Villeurbanne, France
Ph: +33 472 445 655
Fax: +33 481 680 254
info-fr@enzolifesciences.com

Germany
Enzo Life Sciences GmbH
Basler Strasse 57a
DE-79540 Lürrach
Germany
Ph: +49 7621 5500 526
Fax: +49 7621 5500 527
info-de@enzolifesciences.com

Netherlands
Enzo Life Sciences BVBA
Postbus 47
NL-4940 AA Raamsdonksveer
Netherlands
Ph: +32 3 466 0420
Fax: +32 3 808 7033
info-nl@enzolifesciences.com

UK & Ireland
Enzo Life Sciences (UK) Ltd.
1 Colleton Crescent
Exeter EX2 4DG
Ph: 0845 601 1488 (UK customers)
Ph: +44 1392 825900
Fax: +44 1392 825910
info-uk@enzolifesciences.com

Put our experience to work for you!
Our broad range of scientific expertise and industry-proven manufacturing capabilities enables us to provide a comprehensive set of assay kits to save you time and money!