PGE₂ ELISA kit

ADI-900-001
Highly sensitive PGE₂ ELISA kit for inflammation and eicosanoid research.

Product Number/Sizes
ADI-900-001 96 wells
Alternative size available: ADI-901-001 (5x96 wells)

- Highly sensitive measurement, detecting as little as 13.4 pg/ml PGE₂
- Higher throughput format with results in <3 hrs for up to 37 samples in duplicate
- Widely cited in peer reviewed literature
- Ready-to-use liquid color-coded reagents reduce errors
- Reproducible results day-after-day and lot-to-lot

The PGE₂ EIA kit is a colorimetric competitive enzyme immunoassay kit with results in < 3 hours. Absorbance is read at 405 nm. Screen inhibitors of COX II activity by measuring the levels of downstream PGE₂. Commercially available since 1992, this kit is widely cited in peer-reviewed publications. The non-radioactive ready-to-use liquid color-coded reagents reduce errors.

Product Details
ALTERNATIVE NAME: Prostaglandin E₂
SENSITIVITY: 13.4 pg/ml (range 39.1 - 2.500 pg/ml)
ASSAY TIME: <3 hours
APPLICATIONS: ELISA, Colorimetric detection
APPLICATION NOTES: For the quantitative determination of PGE₂ in culture supernatants, serum, saliva, urine, and whole blood from any species. Cited sample types include cerebral spinal fluid, dialysate, gingival crevicular fluid, peritoneal exudate fluid and peritoneal exudate cell supernatant, plasma, and tissue.

WAVELENGTH: 405 nm
SPECIES REACTIVITY: Species independent
USE/STABILITY: Store all components at +4°C, except standard and conjugate at -20°C.
SHIPPING: Blue Ice
CONTENTS: GxM IgG Microtiter plate, Conjugate, Antibody, Assay buffer, Wash buffer concentrate, Standard, pNpp Substrate, Stop solution

SCIENTIFIC BACKGROUND: Prostaglandin E₂ (PGE₂) is an extensively studied prostaglandin owing to its predominance in inflammation, cancer, atherosclerosis, autoimmune disease, and sepsis. Oxidation of arachidonic acid by prostaglandin synthases (COX-1 and COX-2) produces prostaglandin H₂ (PGH₂), which is further metabolized by PGE synthases into its major product, PGE₂. PGE₂ mediates autocrine and paracrine signaling by binding to G-protein coupled receptors (EP1, EP2, EP3, EP4) on the cell surface, functioning to modulate phospholipase C and adenylate cyclase activity. PGE₂ has been of great interest as a therapeutic target, either by modulation of its synthesis by COX inhibitors (NSAIDS) or by modulation of its receptors by downregulation or binding antagonists. PGE₂ production in a variety of tissues has been shown to modulate numerous physiological processes including natriuresis in the kidney, smooth muscle elasticity in the vasculature, and the inflammatory response to damaged tissues by monocytes and macrophages.

REGULATORY STATUS: RUO - Research Use Only
Product Literature References


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