Direct cAMP ELISA kit

Most sensitive (0.006 pmol/ml) colorimetric kit for intracellular cAMP quantification.

This is a colorimetric competitive immunoassay kit for the quantitative determination of intracellular cAMP in cells or tissues lysed in 0.1 M HCl, which is used to stop endogenous phosphodiesterase activity and stabilize the released cyclic AMP. The 0.1M HCl treated samples are then analyzed directly in a microtiter plate without extraction, drying and reconstitution. Sensitivity is increased >10-fold by acetylation (reagents included). Absorbance is read at 405 nm. The large signal-to-background ratio offers superior sensitivity compared to competitors. This kit lets you easily assess adenylyl cyclase activation by GPCRs.

Cyclic AMP (cAMP) is one of the most important "second messengers" involved as a modulator of physiological processes. A number of hormones are known to activate cAMP through the action of the enzyme Adenylate cyclase which converts ATP to cAMP. cAMP has been shown to be involved in the cardiovascular and nervous systems, immune mechanisms, cell growth and differentiation, and general metabolism.

Citations: 157

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Ordering Information

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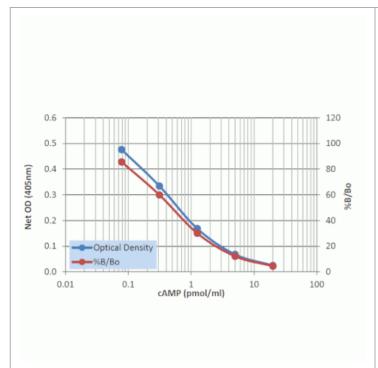
ADI-900-066A

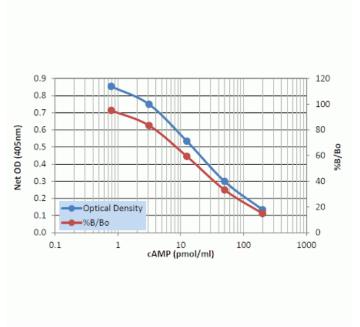
96 wells

Manuals, SDS & CofA

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- Highly sensitive with an optional acetylation protocol which increases sensitivity >10-fold
- High throughput format, results for up to 39 samples in duplicate in just 3 hours
- Flexible assay, species independent
- Easy-to-use pre-coated plate and liquid color-coded reagents reduce errors
- Efficient and well-established sample handling protocols
- Widely cited in peer-reviewed publications





Typical standard curve used to calculate cAMP concentrations for Acetylated assay format.

Typical standard curve used to calculate cAMP concentrations for Non-acetylated assay format.

Handling & Storage

Use/Stability Store all components at +4°C, except standard and conjugate at -20°C.

Shipping Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name cyclic AMP

Application Colorimetric detection, ELISA

Application NotesFor the quantitative determination of cAMP in cell lysates

and tissue from any species. Cited sample types include

tissue culture.

Assay Time 3 hours

Compatibility This product is compatible with the Absorbance 96 Plate

Reader.

Contents GxR IgG Microtiter plate, Conjugate, Antibody, 0.1M HCl,

Neutralizing reagent, Wash buffer concentrate, Standard,

pNpp Substrate, Stop solution, Acetic anhydride,

Triethylamine

Crossreactivity cyclic AMP (100%)AMP, ATP, cyclic GMP, GMP, GTP,

cyclic UMP, CTP (<0.001%)

Sensitivity Non-acetylated: 1.18 pmol/ml (range 0.78 – 200

pmol/ml)Acetylated: 0.006 pmol/ml (range 0.078 – 20

pmol/ml)

Species Reactivity Species independent

Wavelength 405 nm

