cAMP complete ELISA kit

Most sensitive (0.006 pmol/ml and 0.027 pmol/ml) and complete colorimetric kit for intra- and extracellular cAMP quantification.

This is a colorimetric competitive immunoassay kit for the quantitative determination of extracellular cAMP diluted in buffer or intracellular cAMP in cells or tissues lysed in 0.1M HCl. 0.1M HCl 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: 47

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Ordering Information

Order Online »

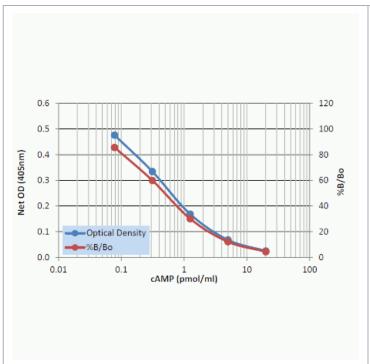
ADI-901-163A

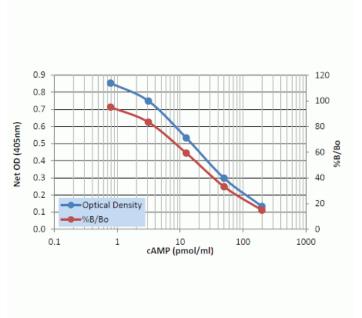
5x96 wells

Manuals, SDS & CofA

View Online »

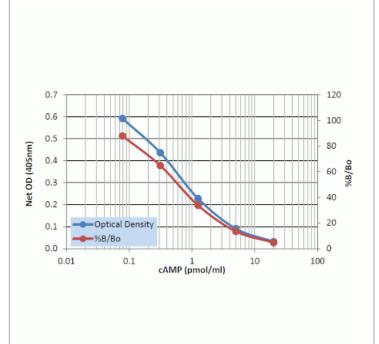
- Versatile and convenient kit used to assay both intracellular and extracellular cAMP
- Highy sensitive measurement of cAMP with an optional acetylation protocol increasing sensitivity
 10-fold (0.006 pmol/ml and 0.027 pmol/ml) for intra- and extracellular cAMP, respectively
- Simple, efficient and wellestablished sample handling protocols
- Widely cited in peer-reviewed publications
- Higher throughput format with results in 3 hours for up to 39 samples in duplicate
- Reliable and consistent lot-to-lot performance
- Save with bulk kit package!

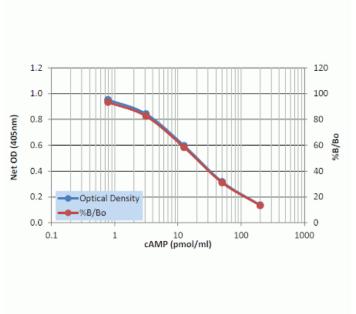




Typical standard curve used to calculate cAMP concentrations in 0.1M HCl for Acetylated assay format.

Typical standard curve used to calculate cAMP concentrations in 0.1M HCl for Non-acetylated assay format.





Typical standard curve used to calculate cAMP concentrations in Assay Buffer 2 for Acetylated assay format.

Typical standard curve used to calculate cAMP concentrations in Assay Buffer 2 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 Notes For the quantitative determination of cAMP in cell lysates, culture supernatants, serum,

saliva, and tissue from any species.

Assay Time 3 hours

Compatibility This product is compatible with the Absorbance 96 Plate Reader.

Contents GxR Microtiter plate, Conjugate, Antibody, Assay buffer 2 concentrate, 0.1 M 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: 0.49 pmol/ml (assay buffer) / 1.18 pmol/ml (HCl) (range (non-

acetylated) 0.78 - 200 pmol/ml)Acetlylated: 0.027 pmol/ml (assay buffer) / 0.006

pmol/ml (HCl) (range (acetylated) 0.078 – 20 pmol/ml)

Species Reactivity Species independent

Wavelength 405 nm



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