

cAMP

Catalog Number: 26002-1

Description: Anti-cAMP Mouse Monoclonal Antibody

Background: cAMP is a ubiquitous second messenger mediating cellular responses to various exogenous and endogenous signaling molecules. cAMP regulates physiological processes by activating protein kinases, gating specific ion channels, modulating cellular cyclic nucleotide concentrations through phosphodiesterases, and activating Epac (exchange protein directly activated by cAMP). The conversion of ATP to cAMP is catalyzed by adenylyl cyclases (ACs). The major family of ACs in mammals is the transmembrane ACs which have nine isoforms and could be activated by G protein Gs and/or Ca²⁺/calmodulin. There is also one soluble AC which could be modulated by bicarbonate and/or Ca²⁺.

Immunogen: cAMP

Tested applications: ELISA, WB, IHC

Recommended dilutions:

ELISA 1:1000-1:5000,

WB 1:1000-1:2000,

Host: mouse

Clonality: Monoclonal

Isotype: IgG

Purity: Purified from ascites

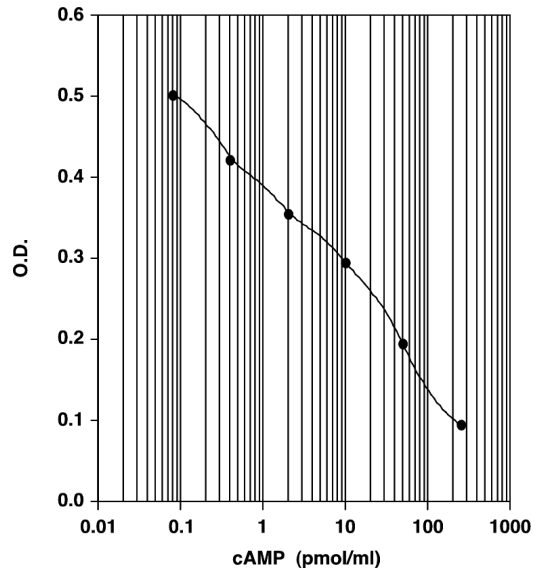
Format: Liquid

Storage buffer:

Preservative: no

Constituents: PBS (without Mg²⁺ and Ca²⁺), pH 7.4,
150 mM NaCl, 50% glycerol

Storage Conditions: Store at -20°C. Avoid freeze / thaw cycles



Sensitivity

Acetylated Version

Mean OD for Bo = 0.565 ± 0.007

Mean OD for Standard #6 = 0.500 ± 0.006

Delta Optical Density (0-0.08 pmol/mL) = 0.065

2 SD's of the Zero Standard = 0.014

$$\text{Sensitivity} = \frac{0.014}{0.065} \times 0.08 \text{ pmol/mL} = \mathbf{17 \text{ fmol/mL}}$$

Typical Standard Curves

For research use only. Not for diagnostic or therapeutic applications.