

## cGMP

**Catalog Number:** 26001-1

**Description:** Anti-cGMP Mouse Monoclonal Antibody

**Background:** cGMP is a ubiquitous second messenger mediating cellular responses to various exogenous and endogenous signaling molecules. cGMP regulates physiological processes by activating protein kinases, gating specific ion channels, and modulating cellular cyclic nucleotide concentrations through phosphodiesterases. The conversion of GTP to cGMP is catalyzed by guanylyl cyclases (GCs). There are two types of GCs in mammals: the soluble and the membrane-bound GCs. The soluble GCs are generally activated when nitric oxide binds to the attached prosthetic heme group. Seven membrane-bound GCs (also named transmembrane or particulated GCs) have been identified in the human genome. GC-A and GC-B are natriuretic peptide receptors. GC-C can be activated by bacterial heat-stable enterotoxins, guanylin and uroguanylin. The activity of transmembrane GCs can also be modulated by other receptor signals through intracellular signaling pathways.

**Immunogen:** cGMP

**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:**

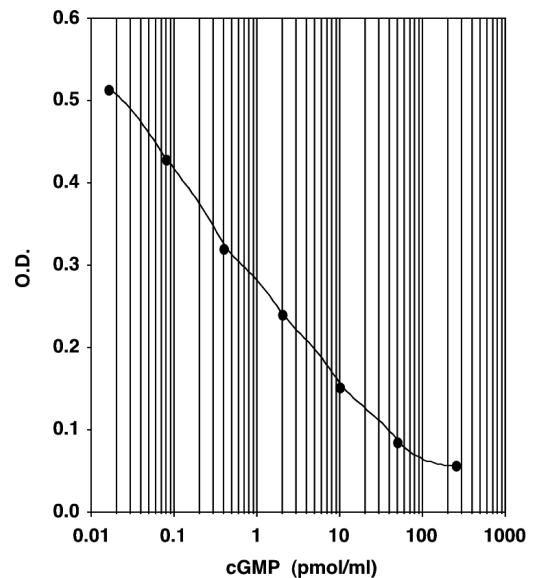
Preservative: no

Constituents: PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4,

150 mM NaCl, 50% glycerol

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

### Typical Standard Curves



### Sensitivity

Acetylated Version

Mean OD for Bo = 0.536 ± 0.010

Mean OD for Standard #6 = 0.403 ± 0.009

Delta Optical Density (0-0.08 pmol/mL) = 0.133

2 SD's of the Zero Standard = 0.020

Sensitivity =  $\frac{0.020}{0.133} \times 0.08 \text{ pmol/mL} = 12 \text{ fmol/mL}$

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