Rev03
Update: Dec,14,2021

DATASHEET

THE™ cGMP Antibody, mAb, Mouse

Cat. No.: A01508

Overview

Specificity	The specificity of the antibody is defined as the ratio of antigen concentration to cross-reactant concentration at 50% inhibition of maximum binding.
Host Species	Mouse
Immunogen	3', 5'-cyclic GMP-8-KLH
Conjugate	Unconjugated

Applications

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

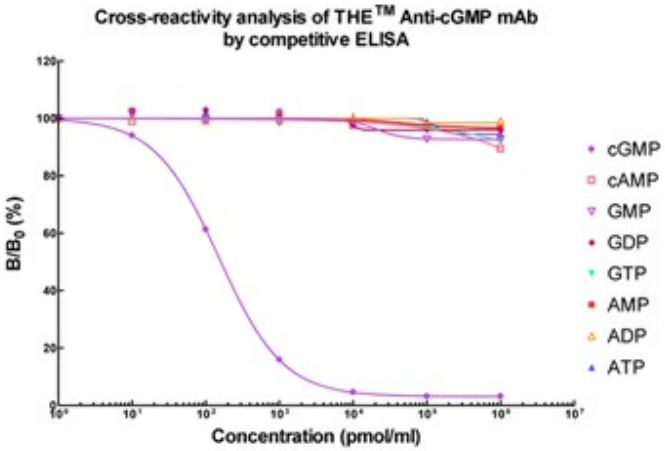
Application	Recommended Usage
ELISA	0.04-0.1 µg/ml
Other applications	User-optimized

Properties

Form	Lyophilized
Storage Buffer	lyophilized with PBS, pH 7.4, containing 0.02% sodium azide
Reconstitution	Reconstitute the lyophilized powder with deionized water (or equivalent) to an final concentration of 0.5 mg/mL.
Storage Instructions	The antibody is stable in lyophilized form if stored at -20°C or below. The reconstituted antibody can be stored for 2-3 weeks at 2-8°C. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.
Purification	Protein A affinity column
Isotype	Mouse IgG2a,κ

Clonality	Monoclonal
Clone Id	2F11E10
Note	GenScript can offer this product per customer's reuqest including product size, buffer components,etc.

Examples



cGMP Competitive ELISA
1.ELISA plate was coated with goat anti mouse IgG antibody
2.Anti-cGMP monoclonal antibody (Cat. No. A01508) at appropriate dilution and cGMP standards or testing compounds were added into appropriate reaction wells.
3.After a period of incubation, cGMP-HRP conjugate (Cat.No.M01058) was added followed by proper period of incubation.
4.ELISA plate was washed with ELISA washing buffer, then TMB substrate was added and developed at room temperature.
5.Stop the reaction with 1.0 N HCl and read the plate at 450nm.

Background

Target Background : Guanosine 3, 5-cyclic monophosphate (cyclic GMP; cGMP) acts as a secondary messenger much like cyclic AMP. It is generally known to activate intracellular protein kinases in response to the binding of membrane-impermeable peptide hormones to the cell surface. cGMP synthesis is catalyzed by guanylate cyclase (GC), which converts GTP to cGMP. Membrane-bound GC is activated by peptide hormones such as atrial natriuretic factor, while soluble GC is typically activated by nitric oxide (NO) to stimulate cGMP synthesis.cGMP is also a common regulator of ion channel conductance, glycogenolysis, and cellular apoptosis. It also relaxes smooth muscle tissues. The roles of cGMP and cAMP may be linked, as evidenced by the fact that some cellular functions are controlled bi-directionally by both cAMP and cGMP. Some functions are stimulated by cGMP and suppressed by cAMP and vice versa.GenScript THE™ cGMP Antibody, mAb, Mouse is developed using 3, 5-cyclic GMP-8-KLH as immunogen.

Synonyms : THE™ cGMP Antibody, mAb, Mouse;

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.

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