

Rev03
Update: Dec,14,2021

DATASHEET

cGMP Antibody, pAb, Rabbit

Cat. No.: A00615

Overview

Specificity	The specificity of the antiserum is defined as the ratio of antigen concentration to cross-reactant concentration at 50% inhibition of maximum binding. The cross-reactivity data obtained in competitive ELISA system is as follows: Compound % Cross-reactivity cGMP <0.0001 cAMP <0.0001 GMP <0.0001 ADP <0.0001 GDP <0.0001 ATP <0.0001 GTP <0.0001
Host Species	Rabbit
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 depend on secondary antibody affinity, antigen concentration, detection method sensitivity, temperature, incubation length, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are starting recommendation for this product.

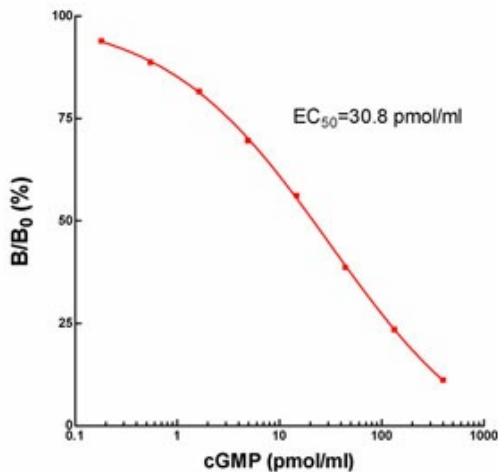
Application	Recommended Usage
ELISA	1:4,000-1:40,000

Properties

Form	Lyophilized
Storage Buffer	Antiserum containing 0.02% sodium azide
Reconstitution	Reconstitute the lyophilized product with deionized water to the volume of 40 μ l.
Storage Instructions	The antibody is stable for 2-3 weeks if stored at 2-8°C. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.
Purification	Antiserum
Isotype	Rabbit IgG

Clonality	Polyclonal
Clone Id	Not applicable

Examples



Competitive ELISA of cGMP standard curve using cGMP Antibody, pAb, Rabbit (GenScript, A00615)

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 Rabbit Anti-cGMP Polyclonal Antibody is developed in rabbit hosts using 3', 5'-cyclic GMP-8-KLH as immunogen.

Synonyms : Rabbit Anti-cGMP pAb;

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