DATASHEET

Version: 2016-08-17

cGMP Antibody, pAb, Rabbit

Cat. No.: A00615-40

Size: 40 µl

Synonyms: Rabbit Anti-cGMP pAb;

Description:

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.

Immunogen: 3', 5'-cyclic GMP-8-KLH

Conjugation: Unconjugated

Ig Subclass: Rabbit IgG

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	100
AMP	<0.0001
cAMP	<0.0001
GMP	<0.0001
ADP	<0.0001
GDP	<0.0001
ATP	<0.0001
GTP	<0.0001

Purification: Antiserum

Applications:

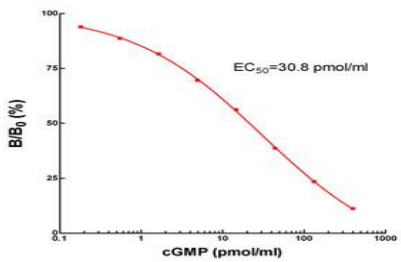
Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may depend on secondary antibody affinity, antigen concentration, detection method sensitivity, temperature, incubations length, and other factors. The suitability of this antibody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

ELISA: 1:4,000-1:40,000

Storage:

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.

Example



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