

## Datasheet for ABIN7540317 **Cyclic GMP ELISA Kit**



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### Overview

Quantity:	96 tests
Target:	Cyclic GMP (cGMP)
Reactivity:	Chemical
Method Type:	Competition ELISA
Detection Range:	0.3-66.7 pM/mL
Minimum Detection Limit:	0.3 pM/mL
Application:	ELISA

### Product Details

Purpose:	Quantitative detection of cGMP in samples such as serum, plasma, saliva, cell culture supernatant, and urine.
Sample Type:	Serum, Plasma, Saliva, Cell Culture Supernatant, Urine
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	Easy - use: All reagents and buffers for cGMP test are provided.
Cross-Reactivity (Details):	No significant cross-reactivity of similar compounds was found.
Sensitivity:	0.11 pmol/mL
Characteristics:	cGMP ELISA Detection Kit is a competition enzyme-linked immunoassay which can be used for quantitative detection of cGMP (Guanosine 3',5'-cyclic monophosphate) in samples such as serum, plasma, saliva, cell culture supernatant, and urine. cGMP is an important secondary

## Product Details

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messenger in signal transduction pathways. It is a common regulator of ion channel conductance, glycogenolysis, and cellular apoptosis. cGMP is a cyclic nucleotide derived from guanosine triphosphate (GTP). The cellular production of cGMP is mediated by Guanylate cyclase (GC). It activates the cGMP-dependent protein kinases which in turn phosphorylate several downstream protein targets. cGMP has an effect on the regulation of cAMP levels by activating or inhibiting specific phosphodiesterases (PDEs). The anti-IgG Capture Plate is pre-coated with fixed amount of Goat anti-rabbit IgG to capture Rabbit Anti-cGMP Polyclonal Antibody. When free cGMP or specimen and HRP-cGMP conjugate are added to the well, they compete in the solution to interact with the cGMP antibody captured on the plate. Other unbound molecules are removed by a wash step. The cGMP-HRP reacts with TMB substrate to develop a blue product in the solution. The reaction is stopped by adding stop solution and the color turns yellow which can be read at 450 nm by a Microtiter plate reader. Using the standard curve, the amount of cGMP present in the unknown samples can be calculated by transforming its absorbance value.

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Components:	Anti-IgG Capture Plate: 1 plate (8 wells x 12 strips)
	Anti-cGMP pAb: 12 ml
	HRP-cGMP: 6 ml
	cGMP Standards (0, 0.3, 0.8, 2.5, 7.4, 22.2, 66.7 pmol/ml): 1.5 ml
	cGMP Standard Stock (10 nmol/ml): 500 µl
	Assay Buffer A: 60 ml
	Assay Buffer B: 1 ml
	20 × Wash Solution: 40 ml
	TMB Substrate: 12 ml
	Stop Solution: 6 ml
	Plate Sealer: 2 pieces
	User Manual: 1 copy

## Target Details

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Target:	Cyclic GMP (cGMP)
Alternative Name:	cGMP ( <a href="#">cGMP Products</a> )
Target Type:	Chemical
Background:	CGMP is an important secondary messenger in signal transduction pathways. It is a common regulator of ion channel conductance, glycogenolysis, and cellular apoptosis. cGMP is a cyclic nucleotide derived from guanosine triphosphate (GTP). The cellular production of cGMP is

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mediated by Guanylate cyclase (GC). It activates the cGMP-dependent protein kinases which in turn phosphorylate several downstream protein targets. cGMP has an effect on the regulation of cAMP levels by activating or inhibiting specific phosphodiesterases (PDEs).

## Application Details

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Assay Time:	2.5 h
Plate:	Pre-coated
Protocol:	The anti-IgG Capture Plate is pre-coated with fixed amount of Goat anti-rabbit IgG to capture Rabbit Anti-cGMP Polyclonal Antibody. When free cGMP or specimen and HRP-cGMP conjugate are added to the well, they compete in the solution to interact with the cGMP antibody captured on the plate. Other unbound molecules are removed by a wash step. The cGMP-HRP reacts with TMB substrate to develop a blue product in the solution. The reaction is stopped by adding stop solution and the color turns yellow which can be read at 450 nm by a Microtiter plate reader. Using the standard curve, the amount of cGMP present in the unknown samples can be calculated by transforming its absorbance value.
Restrictions:	For Research Use only

## Handling

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Handling Advice:	Do not freeze the kit.
Storage:	4 °C
Storage Comment:	The unopened kit is stable for at least 12 months if stored at 2-8 °C, and the opened kit is stable for up to 2 weeks at 2-8 °C.
Expiry Date:	12 months