abcam

Product datasheet

cGMP Assay Kit - Direct Immunoassay ab65356

8 References 2 Images

Overview

Product name	cGMP Assay Kit - Direct Immunoassay
Detection method	Colorimetric
Sample type	Urine, Serum, Plasma, Other biological fluids, Tissue Extracts, Cell Lysate, Cell culture media
Assay type	Quantitative
Sensitivity	> 0.008 µM
Range	0.008 µM - 2 µM
Assay time	3h 00m
Product overview	cGMP Assay Kit ab65356 provides a direct competitive immunoassay for sensitive and quantitative determination of cGMP level in biological samples. The cGMP assay protocol uses the recombinant Protein G coated plate to anchor cGMP polyclonal antibody. cGMP-HRP conjugates directly competes with cGMP from samples for binding to the cGMP specific antibody on the plate. After incubation and washing, the amount of cGMP-HRP bound to plate can easily be determined by reading OD450nm. The intensity of OD450nm is inversely proportional to the concentration of cGMP in samples. The kit provides a new acetylation procedure that improves detection signal significantly. The kit can detect 0.04-10 pmol/well (0.008-2 µM) cGMP samples.
Notes	Previously called cGMP Direct Immunoassay Kit.
Platform	Microplate reader

Properties

Storage instructions	Store at -20°C. Please refer to protocols.
Storage buffer	Preservative: None Constituents: BSA

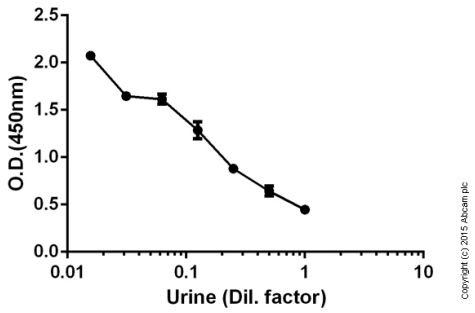
Components	Identifier	100 tests
10X cGMP Assay Buffer	WM	1 x 25ml
Acetylating Reagent A	Violet	1 x 750µl

Components	Identifier	100 tests
Acetylating Reagent B	Black	1 x 1.5ml
Anti-cGMP pAb/BSA	Red	1 vial
cGMP-HRP/BSA	Green	1 vial
HRP Developer	Amber	1 x 10ml
Neutralizing Buffer	NM	1 x 7.5ml
Protein G Coated Plate		1 pack
Standard cGMP (10 nmol)	Yellow	1 vial

Relevance

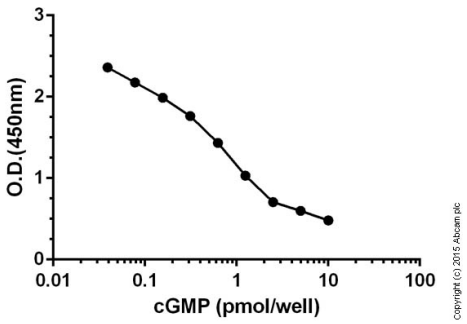
Cyclic guanosine monophosphate (cGMP) is a cyclic nucleotide derived from guanosine triphosphate (GTP). It serves as a second messenger in a manner similar to that observed with cAMP. Peptide hormones, such as the natriuretic factors, activate receptors that are associated with membrane-bound guanylate cyclase (GC). Receptor activation of GC leads to the conversion of GTP to cGMP. Nitric oxide (NO) also stimulates cGMP production by activating soluble GC, perhaps by binding to the heme moiety of the enzyme. Similar to cAMP, cGMP mediates most of its intracellular effects through the activation of specific cGMP dependent protein kinases (PKG).

Images



Functional studies - ab65356 cGMP Direct Immunoassay Kit

O.D.'s of human urine measured at various dilutions (+/- SD)



Functional studies - ab65356 cGMP Direct Immunoassay Kit

Standard curve showing mean of duplicates (+/-SD) with background readings subtracted

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors