cGMP complete ELISA kit

Most sensitive (0.043 pmol/ml) and complete colorimetric kit for intra- and extracellular cGMP quantification.

This is a colorimetric competitive immunoassay kit for the quantitative determination of extracellular cGMP diluted in buffer or intracellular cGMP in cells or tissues lysed in 0.1 M HCl. 0.1M HCl is used to stop endogenous phosphodiesterase activity and stabilize the released cyclic GMP. The 0.1M HCl treated samples are then analyzed directly in a microtiter plate without extraction, drying and reconstitution. Sensitivity is increased by acetylation (reagents included). Absorbance is read at 405 nm. The ready-to-use liquid color-coded reagents provided reduce error.

Cyclic GMP (cGMP), which has been shown to be present at levels typically 10-100 fold lower than cAMP, is formed by the action of the enzyme guanylate cyclase on GTP. Some hormones, such as Acetylcholine, Insulin, and Oxytocin, as well as certain other chemicals like Serotonin and Histamine cause an increase in cGMP levels. Stimulators of guanylate cyclase such as the vasodilators nitroprusside, nitroglycerin, sodium nitrate, and nitric oxide (NO) also stimulate cGMP levels.

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Ordering Information

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ADI-900-164	96 wells

Manuals, SDS & CofA

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- Versatile and convenient kit to assay both intracellular and extracellular cGMP
- High sensitivity with an optional acetylation protocol which increases sensitivity 10-fold (0.059 pmol/ml)
- Reliable and consistent lot-to-lot performance
- Higher throughput format with results in just 3 hours for up to 39 samples in duplicate
- Simple, efficient and well-established sample handling protocols

Handling & Storage

Use/Stability	Store all components at +4°C, except standard and conjugate at -20°C.
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	cyclic GMP
Application	Colorimetric detection, ELISA
Application Notes	For the quantitative determination of cGMP in cell lysates, culture supernatants, plasma, serum, saliva, tissue, and urine from any species.
Assay Time	3 hours
Compatibility	This product is compatible with the **Absorbance 96 Plate Reader**.
Contents	GxR IgG Microtiter plate, Conjugate, Antibody, 0.1M HCl, Assay buffer 2, Neutralizing reagent, Wash buffer concentrate, Standard, pNpp Substrate, Stop solution, Triethylamine, Acetic anhydride
Crossreactivity	cyclic GMP (100%) and <0.001%: GMP, GTP, cyclic AMP, AMP, ATP, cyclic UMP, CTP
Sensitivity	Assay Buffer : 0.42 pmol/ml (non-acetylated) 0.043 pmol/ml (acetylated) HCl: 0.604 pmol/ml (non-acetylated) 0.059 pmol/ml (acetylated) (range 0.8 – 500 pmol/ml (non-acetylated); 0.08 – 50 pmol/ml (acetylated))
Species Reactivity	Species independent
Wavelength	405 nm

ENZO LIFE SCIENCES, Inc.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com

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