

# 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.

Citations: 36

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## Ordering Information

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ADI-901-164

5x96 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
- Save with bulk kit package!

# 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 Microtiter plate, Conjugate, Antibody, Assay buffer 2 concentrate, 0.1 M HCl, Neutralizing reagent, Wash buffer concentrate, Standard, pNpp Substrate, Stop solution, Acetic anhydride, Triethylamine

**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



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