

Cyclic AMP and Cyclic GMP ELISA Kits



Cyclic AMP (cAMP) and cyclic GMP (cGMP) are cellular second messengers that act as mediators between extracellular signals and intracellular cascades to regulate many functions, including cell metabolism, gene regulation, and immune responses. Cayman offers ELISA kits tailored to provide highly sensitive results for the accurate determination of cAMP and cGMP levels.

Assay Features:

- High Specificity & Sensitivity
- Low Cross-Reactivity
- Flexible Sample Preparation
- Overnight (18 hr) Incubation
- Colorimetric Readout (405-420 nm)

cGMP ELISA Kit

Cyclic GMP ELISA Kit - Item No. 581021

Measure acetylated or non-acetylated cGMP. Includes an optional acetylation protocol for increased sensitivity.*

	Acetylated (pmol/ml)
Assay Range	0.023-3
Midpoint (50% B/B ₀)	0.46
Sensitivity (80% B/B ₀)	0.1

*We recommend following the acetylated protocol for samples with expected cAMP concentrations of <5 pmol/ml.

Available without acetic anhydride as *Item No. 581022* for our international customers with shipping restrictions.

	Non-Acetylated (pmol/ml)
Assay Range	0.23-30
Midpoint (50% B/B ₀)	3-6
Sensitivity (80% B/B ₀)	1

cAMP ELISA Kits

Cyclic AMP Select ELISA Kit

Item No. 501040

A highly sensitive ELISA for measuring cAMP without the need for acetylation.

	Non-Acetylated (pmol/ml)
Assay Range	0.09-200
Midpoint (50% B/B ₀)	4-8
Sensitivity (80% B/B ₀)	0.6

Cyclic AMP ELISA Kit - Item No. 581001

Measure acetylated or non-acetylated cAMP. Includes an optional acetylation protocol for increased sensitivity.*

	Acetylated (pmol/ml)
Assay Range	0.078-10
Midpoint (50% B/B ₀)	0.5
Sensitivity (80% B/B ₀)	0.1

*We recommend following the acetylated protocol for samples with expected cAMP concentrations of <5 pmol/ml.

Available without acetic anhydride as *Item No. 581002* for our international customers with shipping restrictions.

	Non-Acetylated (pmol/ml)
Assay Range	0.3-750
Midpoint (50% B/B ₀)	15-25
Sensitivity (80% B/B ₀)	3

Select Publications Featuring Our cAMP/cGMP ELISA Kits

Cyclic AMP Select ELISA Kit

Li, Y., Chen, L., Zhang, P., *et al.* ClpV3 of the H3-type VI secretion system (H3-T6SS) affects multiple virulence factors in *Pseudomonas aeruginosa*. *Front. Microbiol.* **11**, 1096 (2020).

Cyclic AMP ELISA Kit

Zhou, T., Meadows, V., Kundu, D., *et al.* Mast cells selectively target large cholangiocytes during biliary injury via H2HR-mediated cAMP/pERK1/2 signaling. *Hepatol. Commun.* **6(10)**, 2715-2731 (2022).

Cyclic di-GMP ELISA Kit

Liu, R., Kang, Y., and Chen, L. Activation mechanism of human soluble guanylate cyclase by stimulators and activators. *Nat. Commun.* **12(1)**, 5492 (2021).

About Cayman Assays

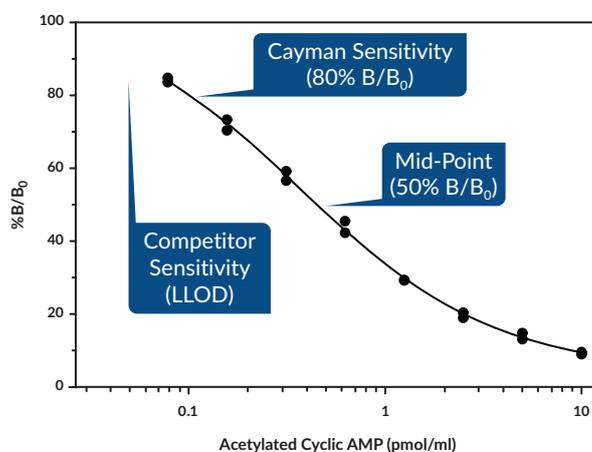
Cayman's AChE Tracer Advantage

Cayman's cAMP/cGMP ELISAs were designed with competitive assay principles and employ AChE as the detection enzyme. AChE offers these unique advantages:

- Fast turnover rate (3X faster than HRP or AP)
- Active in a wide pH range (pH 5.0-10.0)
- Does not self-inactivate during turnover
- Enables redevelopment if assay is accidentally splashed or spilled

Assay Sensitivity Defined

Because not all assay companies define their sensitivity similarly, we point out the intended definitions of the points of quantitation on the typical standard curves generated by our kits. Cayman's assays report sensitivity as the 80% B/B₀ point on the standard curve. This value can be trusted to give you reliable, reproducible data.



Cyclic AMP ELISA Kit - Item No. 581001 (with acetylation step)
Points of Quantitation Defined.



Simplified Workflows
Extensive Quality Control
Performance Reliability
Expert Technical Support

Learn more about our assay kits and why scientists keep choosing Cayman assays for their research.



View All Cell Signaling Assays at www.caymanchem.com