Cyclic AMP and Cyclic GMP ELISA Kits

Cyclic nucleotide ELISA kits tailored to provide highly sensitive results for accurate determination of intracellular and extracellular cAMP/cGMP levels

Product Name	Cayman Item No.	Size	VWR Catalog No.
Cyclic AMP ELISA Kit	581001	96 wells 480 wells	75817-364 75817-362
Cyclic AMP Select ELISA Kit	501040	96 wells 480 wells	75816-838 75816-836
Cyclic GMP ELISA Kit	581021	96 wells 480 wells	75817-372 75817-370



Flexible Sample Preparation

Cayman Chemical's cyclic AMP (cAMP) and cyclic GMP (cGMP) ELISA kits are competitive assays that can detect sub-picomolar concentrations of cAMP/cGMP in various sample types. Acetic anhydride is provided in these kits for use in an optional acetylation procedure prior to sample analysis. Because acetylation yields up to a 10-fold increase in assay sensitivity it is often recommended, but depending on your research application, this initial sample preparation step is not always necessary.* Use this comparison chart of typical assay ranges to determine if your sample would benefit from a pre-assay acetylation step. Note that Cayman's Cyclic AMP Select ELISA Kit achieves excellent sensitivity without the need to perform a pre-assay acetylation step.

	Acetylated (pmol/ml)			Non-Acetylated (pmol/ml)		
	Assay Range	50% B/B ₀	80% B/B ₀	Assay Range	50% B/B ₀	80% B/B ₀
Cyclic AMP ELISA Kit	0.078-10	0.5	0.1	0.3-750	15-25	3
Cyclic AMP Select ELISA Kit	Extra acetylation step not required!			0.09-200	4-8	0.6
Cyclic GMP ELISA Kit	0.023-3	0.46	0.1	0.23-30	3-6	1

*Acetylation is recommended if the expected cAMP/cGMP concentration is <5 pmol/ml

Multiple Sample Matrix Compatibility

Cayman's cAMP/cGMP ELISAs are not species specific and can be used universally with the following sample types:

	Int	racellular	Extracellular			
	Cell Lysates	Tissue Homogenates	Cell Media	Plasma	Urine	
Cyclic AMP ELISA Kit	\checkmark	\checkmark		\checkmark	\checkmark	
Cyclic AMP Select ELISA Kit		\checkmark	\checkmark	\checkmark	\checkmark	
Cyclic GMP ELISA Kit	\checkmark	\checkmark		\checkmark	\checkmark	



Cayman's AChE Tracer Advantage

Each of these competitive assays relies upon acetylcholinesterase (AChE), an enzyme extracted from the electric organ of the electric eel. Utilizing AChE as a tracer in Cayman's cAMP/cGMP ELISAs offers these unique advantages:

- AChE does not self-inactivate during turnover.
- AChE can be redeveloped if the plate is accidentally splashed or spilled.
- AChE is highly stable under most assay conditions (*e.g.*, wide pH range and not inhibited by buffer salts or preservatives).
- AChE does not require a 'stop' reagent, the plate may be read within a broad time frame.

Assay Sensitivity Defined

Because not all assay companies define their sensitivity similarly, we point out the intended definitions of the particular points of quantitation on the standard curve generated by our competitive Cyclic AMP ELISA Kit. Cayman's assay sensitivity is defined as the 80% B/B_0 point in which 80% binding is the minimum level where reliable, reproducible data can be obtained. Many immunoassay companies define sensitivity by the lower limit of detection (LLOD). While this is the lowest level of analyte detected by the kit, this range is typically not reliable nor reproducible.



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

Batch-to-Batch Consistency

We value the importance of integrity in scientific research. Each of our assay kits undergoes rigorous quality testing to certify high precision and accuracy and to deliver the sensitivity and specificity needed to detect biologically significant analyte levels. Our attention to these details ensures you will obtain reproducible results, from day-to-day and batch-to-batch.

cAMP Standard Curve (%Binding) Over 4 Years



Cyclic AMP ELISA Kit - Item No. 581001 (without acetylation step) Batch-to-Batch Consistency. Average binding data for all production batches, approximately 8 batches, of cAMP ELISA kits between 2014-2017.



Discover more than 400 Cayman assay kits Contact your **VWR sales representative**



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