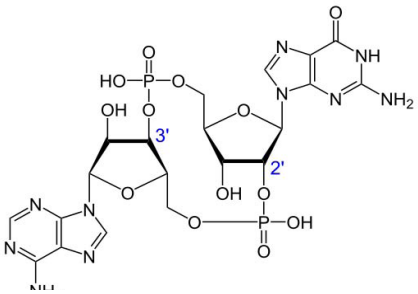
CELL SIGNALING

INFLAMMATION

DetectX® 2′,3′-Cyclic GAMP ELISA Kits



2′,3′-Cyclic guanosine monophosphate–adenosine monophosphate (cyclic GMP-AMP, cGAMP, cyclic [G(2′,5′)pA(3′,5′)p]) . 2′,3′-cGAMP is referred to as “noncanonical“ cGAMP due to the presence of the atypical 2′-5′ phosphodiester linkage between the guanosine and the adenosine. Produced in mammalian cells by cGAS (cGAMP synthase) in response to double-stranded DNA in the cytoplasm binding to cGAS, cGAMP binds to the stimulator of interferon genes (STING). Subsequently STING induces the TBK1-IRF3-dependent production of IFN-β. This cGAS-cGAMP-STING pathway has been shown to play a critical role in pathogen detection and physiological conditions such as metabolic dysregulation, autoimmunity, and cancer.

DetectX® 2′,3′-CYCLIC GAMP ELISA KITS (K067-H1/H5/H1D/H1W/H5W)

MULTI SPECIES

Our DetectX® 2′3′-Cyclic GAMP ELISA Kit is the first of its kind and is also available in a 384-well format to measure mammilian GAMP.

- **Measure** 2′,3′-cGAMP in tissues and cells
- **Sensitivity:** 0.04 pmol/mL, 2 fmol/well
- **Standard Range**: 20-0.082 pmol/mL
- **Sample types:** cell lysates, tissue extracts and tissue culture media
- **Measure** up to **39 or 231 (96-well)** or **183 (384-well)** in duplicate
- 4°C stable reagents

RELATED DetectX® KITS

- Acetylcholinesterase Fluorescent Activity Kit **(K015-F1)**
- Butyrylcholinesterase Fluorescent Activity Kit **(K016-F1)**
- Cyclic AMP Direct ELISA Kits **(K019-H1/H5)**
- Cyclic AMP Direct Chemiluminescent ELISA Kits **(K019-C1/C5)**
- Cyclic GMP Direct ELISA Kits **(K065-H1/H5)**
- Cyclic GMP Direct Chemiluminescent ELISA Kits **(K020-C1/C5)**
- Corticosterone ELISA Kits **(K014-H1/H5/H1W/H5W)**
- Corticosterone Chemiluminescent ELISA Kits **(K014-C1/C5)**
- PGE_2 ELISA Kits **(K051-H1/H5/H1W/H5W)**
- Protein Kinase A (PKA) Colorimetric Activity Kit **(K027-H1)**

Intra Assay Precision

Three samples were diluted with Assay Buffer and run in replicates of 20 in an assay. The mean and precision of the calculated cGAMP concentrations were:

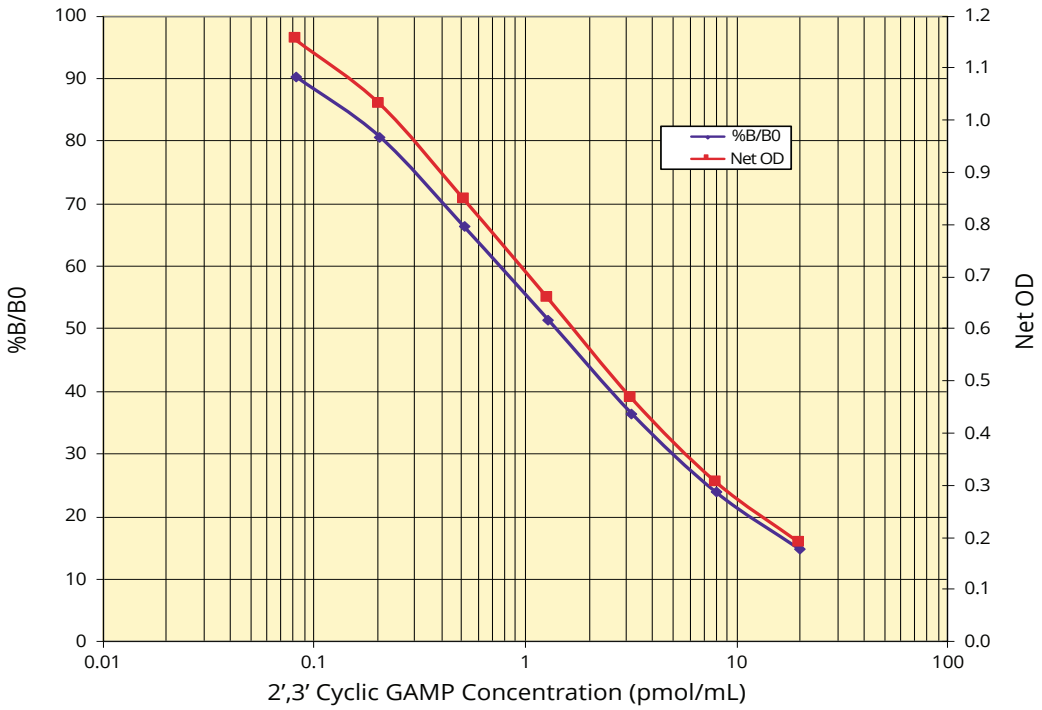
Sample	2',3'-Cyclic GAMP Conc. (pmol/mL)	%CV
1	1.08	6.2
2	5.14	6.1
3	10.4	5.7

Inter Assay Precision

Three samples were diluted with Assay Buffer and run in duplicates in twenty assays run over multiple days by multiple operators. The mean and precision of the calculated cGAMP concentrations were:

Sample	2',3'-Cyclic GAMP Conc. (pmol/mL)	%CV
1	1.00	8.5
2	4.92	6.7
3	9.97	8.0

Typical Standard Curve



Run your own standard curve for calculation of results. Do not use this data.