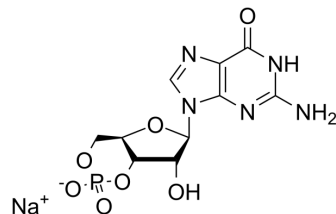


## Cyclic GMP sodium

<b>Cat. No.:</b>	HY-113469A
<b>CAS No.:</b>	40732-48-7
<b>Molecular Formula:</b>	C <sub>10</sub> H <sub>11</sub> N <sub>5</sub> NaO <sub>7</sub> P
<b>Molecular Weight:</b>	367.19
<b>Target:</b>	Endogenous Metabolite
<b>Pathway:</b>	Metabolic Enzyme/Protease
<b>Storage:</b>	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 83.33 mg/mL (226.94 mM; Need ultrasonic)

Concentration	Mass			
	1 mg	5 mg	10 mg	
1 mM	2.7234 mL	13.6169 mL	27.2339 mL	
5 mM	0.5447 mL	2.7234 mL	5.4468 mL	
10 mM	0.2723 mL	1.3617 mL	2.7234 mL	

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

Cyclic GMP sodium (cGMP) is an important regulator of short-term changes in smooth muscle tone and longer-term responses to chronic drug research or proliferative signals, it is in response to atrial natriuretic peptide (ANP) or nitric oxide (NO). Cyclic GMP sodium interacts with cation channels to regulate ion transport or activate the cyclic GMP-dependent protein kinase to result in protein phosphorylation<sup>[1][2]</sup>.

#### IC<sub>50</sub> & Target

Human Endogenous Metabolite

### REFERENCES

[1]. Rybalkin SD, et al. Cyclic GMP phosphodiesterases and regulation of smooth muscle function. *Circ Res.* 2003 Aug 22;93(4):280-91.

[2]. Murad F. Shattuck Lecture. Nitric oxide and cyclic GMP in cell signaling and drug development. *N Engl J Med.* 2006 Nov 9;355(19):2003-11. doi: 10.1056/NEJMsa063904. PMID: 17093251.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA