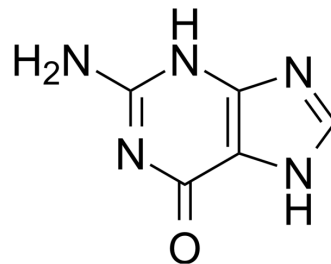


Guanine

Cat. No.:	HY-Y1055
CAS No.:	73-40-5
Molecular Formula:	C ₅ H ₅ N ₅ O
Molecular Weight:	151.13
Target:	DNA/RNA Synthesis; Endogenous Metabolite
Pathway:	Cell Cycle/DNA Damage; Metabolic Enzyme/Protease
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

H₂O : 1 mg/mL (6.62 mM; ultrasonic and warming and heat to 80°C)
DMSO : 0.15 mg/mL (0.99 mM; Need ultrasonic and warming)

Preparing Stock Solutions	Solvent		1 mg	5 mg	10 mg
	Concentration	Mass			
	1 mM		6.6168 mL	33.0841 mL	66.1682 mL
	5 mM		1.3234 mL	6.6168 mL	13.2336 mL
	10 mM		---	---	---

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

BIOLOGICAL ACTIVITY

Description

Guanine is one of the fundamental components of nucleic acids (DNA and RNA). Guanine is a purine derivative, consisting of a fused pyrimidine-imidazole ring system with conjugated double bonds. Guanine has the potential to serve as a large-capacity N pool^[1].

IC₅₀ & Target

Human Endogenous Metabolite

Microbial Metabolite

CUSTOMER VALIDATION

- Talanta. 2023 Sep 6, 125171.
- BMC Neurol. 2023 Dec 16;23(1):444.
- Research Square Preprint. 2022 Feb.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Mojzeš P, et al. Guanine, a high-capacity and rapid-turnover nitrogen reserve in microalgal cells. Proc Natl Acad Sci U S A. 2020 Dec 22;117(51):32722-32730.

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

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