N-Acetyl-D-glucosamine

Cat. No.: HY-A0132 CAS No.: 7512-17-6 Molecular Formula: C₈H₁₅NO₆ Molecular Weight: 221.21

Target: **Endogenous Metabolite** Pathway: Metabolic Enzyme/Protease Storage: -20°C, stored under nitrogen

* In solvent: -80°C, 6 months; -20°C, 1 month (stored under nitrogen)

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 125 mg/mL (565.07 mM; ultrasonic and warming and heat to 60°C)

H₂O: 100 mg/mL (452.06 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	4.5206 mL	22.6030 mL	45.2059 mL
	5 mM	0.9041 mL	4.5206 mL	9.0412 mL
	10 mM	0.4521 mL	2.2603 mL	4.5206 mL

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

In Vivo

- 1. Add each solvent one by one: PBS Solubility: 50 mg/mL (226.03 mM); Clear solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 3.25 mg/mL (14.69 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 3.25 mg/mL (14.69 mM); Clear solution
- 4. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 3.25 mg/mL (14.69 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	N-Acetyl-D-Glucosamine (N-Acetyl-2-amino-2-deoxy-D-glucose) is a monosaccharide derivative of glucose.		
IC ₅₀ & Target	Human Endogenous Metabolite	Microbial Metabolite	

CUSTOMER VALIDATION

• J Neuroinflammation. 2023 Jun 22;20(1):146.

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REFERENCES

[1]. Slawson C, et al. O-GlcNAc cycling: how a single sugar post-translational modification is changing the way we think about signaling networks. J Cell Biochem. 2006 Jan 1;97(1):71-83.

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

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