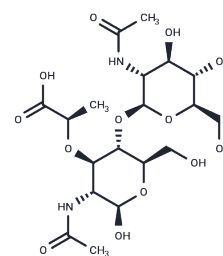


GlcNAc-MurNAc

Chemical Properties

CAS No. :	4500-70-3
Formula:	C ₁₉ H ₃₂ N ₂ O ₁₃
Molecular Weight:	496.46
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	GlcNAc-MurNAc is a disaccharide and mild TLR4 agonist with a K _d of 383 μM for mouse TLR4. It directly binds to TLR4, activating the downstream NF-κB and IRF pathways. Additionally, GlcNAc-MurNAc ameliorates dextran sulfate sodium salt (DSS)-induced colitis in mice through a TLR4-dependent mechanism, making it useful for inflammatory bowel disease research.
Targets(IC50)	NF-κB,Caspase,Interleukin,TLR,TNF
In vitro	GlcNAc-MurNAc (GM) (1-8 mM, 24 h) exhibits immune activity in RAW264.7, BMDMs, and THP-1 cells through a mechanism independent of NOD. Additionally, GlcNAc-MurNAc (4 mM, 24 h) activates the immune response in wild-type bone marrow-derived macrophages (BMDMs) in a TLR4-dependent manner.
In vivo	Administered at a dose of 10 mg/kg intraperitoneally, GlcNAc-MurNAc (GM) reduces DSS-induced colitis in mice through a TLR 4-dependent mechanism when given once daily for 9 days.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0143 mL	10.0713 mL	20.1426 mL
5 mM	0.4029 mL	2.0143 mL	4.0285 mL
10 mM	0.2014 mL	1.0071 mL	2.0143 mL
50 mM	0.0403 mL	0.2014 mL	0.4029 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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