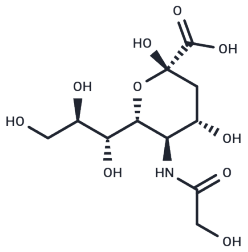
Data Sheet (Cat.No.T19456)

TargetMol

N-Glycolylneuraminic acid

Chemical Properties



CAS No. : 1113-83-3

Formula: C11H19NO10

Molecular Weight: 325.27

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	N-Glycolylneuraminic acid (GcNeu) is a nonhuman sialic acid molecule synthesized in pigs. N-Glycolylneuraminic acid is a receptor of human and animal IAVs.
Targets(IC50)	Endogenous Metabolite,Influenza Virus
In vitro	Expression of N-Glycolylneuraminic acid on human cells clearly suppressed infectivity of IAVs that possess N-Glycolylneuraminic acid binding ability. Furthermore, there was no difference in infectivity of a transfectant virus that included the wild-type HA gene from A/Memphis/1/1971 (H3N2), which shows no N-Glycolylneuraminic acid binding, between parent MCF7 cells and cells stably expressing the monkey CMAH gene (CMAH-MCF7 cells). On the other hand, cell entry of the transfectant virus that included the N-Glycolylneuraminic acid-binding HA gene with a single mutation to Tyr at position Thr155 was arrested at the stage of internalization from the plasma membrane of the CMAH-MCF7 cells[1].

Solubility Information

Solubility	DMSO: 33.7 mg/mL (103.61 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0744 mL	15.3718 mL	30.7437 mL
5 mM	0.6149 mL	3.0744 mL	6.1487 mL
10 mM	0.3074 mL	1.5372 mL	3.0744 mL
50 mM	0.0615 mL	0.3074 mL	0.6149 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.

Reference

Takahashi T, et al. N-glycolylneuraminic acid on human epithelial cells prevents entry of influenza A viruses that possess N-glycolylneuraminic acid binding ability. J Virol. 2014 Aug;88(15):8445-56.