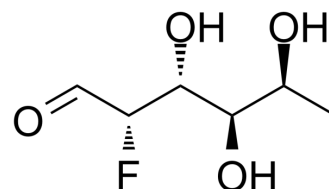


2-Deoxy-2-fluoro-L-fucose

Cat. No.:	HY-116705
CAS No.:	70763-62-1
Molecular Formula:	C ₆ H ₁₁ FO ₄
Molecular Weight:	166.15
Target:	Others
Pathway:	Others
Storage:	-20°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (601.87 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	Preparing Stock Solutions		1 mg	5 mg	10 mg
		1 mM	6.0187 mL	30.0933 mL	60.1866 mL
		5 mM	1.2037 mL	6.0187 mL	12.0373 mL
	10 mM	0.6019 mL	3.0093 mL	6.0187 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (15.05 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (15.05 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (15.05 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	2-Deoxy-2-fluoro-L-fucose, an L-fucose analog, is a fucosylation inhibitor. 2-Deoxy-2-fluoro-L-fucose inhibits de novo synthesis of GDP-fucose in mammalian cells. Fucosylation is a relatively well-defined biomarker for progression in many human cancers; for example, pancreatic and hepatocellular carcinoma ^[1] .
In Vitro	2-Deoxy-2-fluoro-L-fucose (2FF) (100-500 μM) suppresses fucosylation in 4T1 cells ^[1] . 2-Deoxy-2-fluoro-L-fucose (100 μM; 4T1 cells) decreases phosphorylation of Smad 1/5 and Smad 2 ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Herrera H, et al. Core-Fucosylated Tetra-Antennary N-Glycan Containing A Single N-Acetylglucosamine Branch Is Associated with Poor Survival Outcome in Breast Cancer. *Int J Mol Sci.* 2019;20(10):2528. Published 2019 May 23.

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

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