4-Methylumbelliferyl β-D-Glucopyranoside

Cat. No.: HY-123633

CAS No.: 18997-57-4

Molecular Formula: $C_{16}H_{18}O_8$

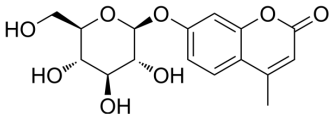
Molecular Weight: 338.31

Target: Glucosidase

Pathway: Metabolic Enzyme/Protease

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (295.59 mM; Need ultrasonic)
DMF : 50 mg/mL (147.79 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.9559 mL	14.7793 mL	29.5587 mL
5 mM	0.5912 mL	2.9559 mL	5.9117 mL
10 mM	0.2956 mL	1.4779 mL	2.9559 mL

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

BIOLOGICAL ACTIVITY

Description

4-Methylumbelliferyl β-D-Glucopyranoside, a β-D-glucoside, is a fluorogenic substrate for β-glucosidase, utilizes to assay β-glucosidase activity[1]. 4-Methylumbelliferyl β-D-Glucopyranoside releases the highly fluorescent 4-methylumbelliferyl (4-MU), which has an emission maximum at 445-454 nm. The excitation maximum for 4-MU is pH-dependent: 330, 370, and 385 nm at pH 4.6, 7.4, and 10.4, respectively[2].

IC_{50} & Target

4-Methylumbelliferyl β-D-Glucopyranoside is a fluorogenic substrate for β-glucosidase[1].

REFERENCES

[1]. Smitka CM,et al. Rapid fluorogenic assay for differentiation of the Candida parapsilosis group from other Candida spp. J Clin Microbiol. 1989;27(1):203-206.

[2]. Oftedal L, et al. Validation and assessment of preanalytical factors of a fluorometric in vitro assay for glucocerebrosidase activity in human cerebrospinal fluid. Sci Rep.

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