Product Data Sheet

Celloheptaose

Cat. No.:HY-N10518CAS No.:52646-27-2Molecular Formula: $C_{42}H_{72}O_{36}$ Molecular Weight:1153Target:OthersPathway:Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	Celloheptaose is an oligosaccharide, consisting of seven glucose residues. Celloheptaose is the substrate of Polysaccharide monooxygenases (PMOs), to generate oxidized cellulo-oligosaccharides $^{[1][2]}$.
In Vitro	Celloheptaose, is regulated by Clostridium thermocellum cellodextrin phosphorylase (CtCDP) via CDP-CBM (Carbohydrate-binding module) fusion protein form on synthesis and degradation direction ^[1] . Celloheptaose (1%; 48 h) can be oxidized by CtPMO1, isolated from Chaetomium thermophilum, at C4, C1 and C6 positions to generate C1-, C6- and C4-oxidized oligosaccharides ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Ye X, et al. Fusion of a family 9 cellulose-binding module improves catalytic potential of Clostridium thermocellum cellodextrin phosphorylase on insoluble cellulose. Appl Microbiol Biotechnol. 2011 Nov;92(3):551-60.

[2]. Chen C, et al. Regioselectivity of oxidation by a polysaccharide monooxygenase from Chaetomium thermophilum. Biotechnol Biofuels. 2018 Jun 5;11:155.

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