Product Data Sheet

Product Name: Chitopentaose pentahydrochloride
Cat. No.: GC60695

Chemical Properties

Cas. No.	117467-64-8		
SMILES	OC[C@@H](O[C@H]1O[C@@H]([C@@H]([C@H]2N)O)[C@H](O[C@H]2O[C@H]([C@H](O)CO)[C@H](O)[C@@H](N)C=O)CO)[C@H]([C@@H]([C@H]1N)O)O[C@@H]([C@@H]([C@H]3O)N)O[C@@H]([C@H]3O[C@@H]([C@@H]([C@H]4O)N)O[C@@H]([C@H]4O)CO)CO.Cl.Cl.Cl.Cl.Cl		
Formula	$C_{30}H_{62}Cl_5N_5O_{21}$	M.Wt	1006.1
Solubility	H_2O : 250 mg/mL (248.48 mM; Need ultrasonic)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

Chitopentaose pentahydrochloride is a chitosan oligosaccharide with anti-inflammatory effect. Chitopentaose pentahydrochloride is a substrate of gene encoding chitinase B (FjchiB)[1][2].

[1]. Qini Zhao, et al. Chitoheptaose Promotes Heart Rehabilitation in a Rat Myocarditis Model by Improving Antioxidant, Anti-Inflammatory, and Antiapoptotic Properties. Oxid Med Cell Longev. 2020 Apr 11;2020:2394704. [2]. Papa Rao Vaikuntapu, et al. Applicability of endochitinase of Flavobacterium johnsoniae with transglycosylation activity in generating long-chain chitooligosaccharides. Int J Biol Macromol. 2018 Oct 1;117:62-71.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA