Product Data Sheet

Product Name: L-Diguluronic acid
Cat. No.: GC60980

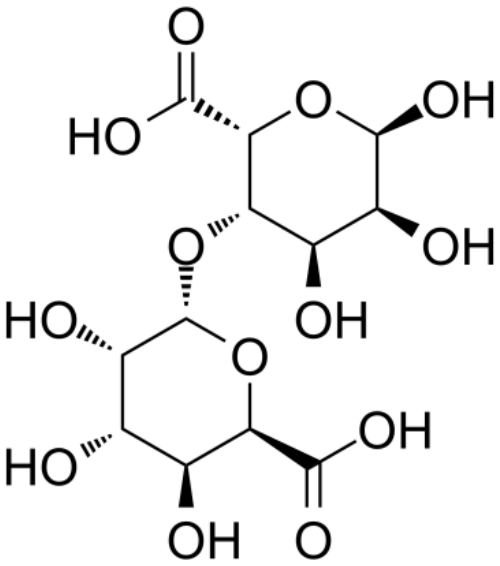
Chemical Properties

Cas. No.	34044-54-7		
SMILES	O[C@H]1[C@H]([C@H]([C@@H]([C@H](C(O)=O)O1)O[C@H]2[C@H]([C@H]([C@@H]([C@H](C(O)=O)O2)O)O)O)O)O		
Formula	$C_{12}H_{18}O_{13}$	M.Wt	370.26
Solubility		Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		

Caution: Product has not been fully validated for medical applications. For research use only.
Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Structure



Background

L-Diguluronic acid is a linear polysaccharide copolymer composed of two L-guluronic acid (G) and can be used to from Alginate[1]. Alginate is a generic name of unbranched polyanionic polysaccharides and can be used for the research of antifungal agents delivery carries[2].

Alginate is a generic name assigned to a series of polyanionic polysaccharides of β-d-mannuronic acid (M) and α-l-guluronic acid (G). Alginate is linked by a 1→4 linkage and displaying chain homosequences of MMM and GGG, interdispersed with MGM heterosequences[1].Alginate is widely used for obtainment of drug delivery systems due to its non-toxicity, biodegradability, biocompatibility, mucoadhesive, and non-immunogenic properties. Additionally, alginate-based antifungal delivery systems have great potential in the treatment of fungal infections in vivo[1].

Product Data Sheet

[1]. R.A. Shirwaiker, et al. L-Guluronic Acid [2]. Cristina de Castro Spadari, et al. Potential Use of Alginate-Based Carriers As Antifungal Delivery System.Front Microbiol. 2017 Jan 30;8:97.

Caution: Product has not been fully validated for medical applications. For research use only.
Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA