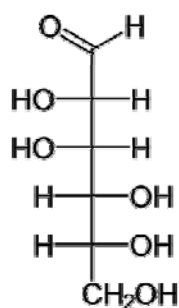


D-Mannose



D-Mannose

Mannose is important in human metabolism, especially in the glycosylation of certain proteins. Mannose can be formed by the oxidation of mannitol.

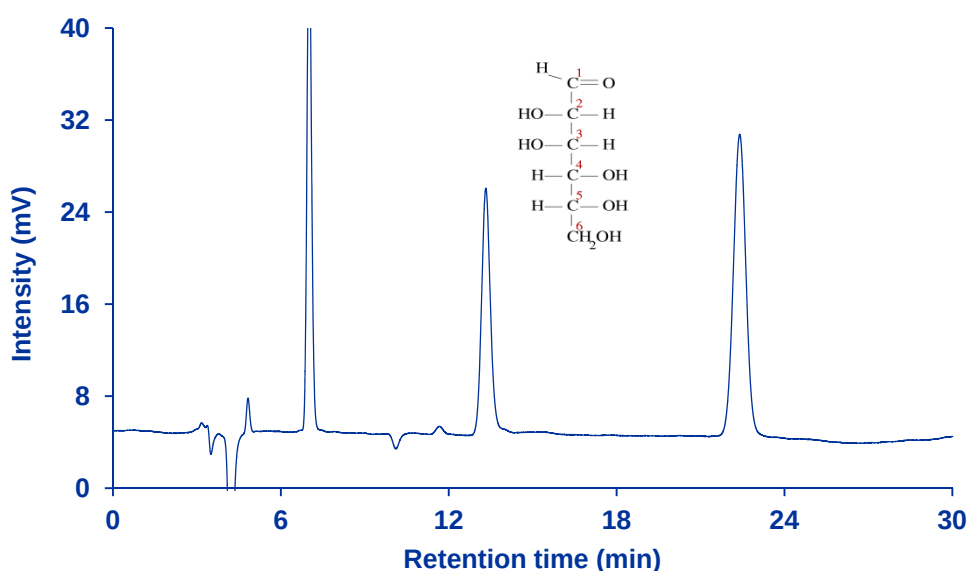
D-mannose is used for preventing urinary tract infections and treating carbohydrate-deficient glycoprotein syndrome, an inherited metabolic disorder.

D-Mannose in Pharmaceutical Formulation

SeQuant® ZIC®-cHILIC

Chromatographic Conditions

Column:	SeQuant® ZIC®-cHILIC (3µm, 100Å) PEEK 150 x 4.6 mm	1.50661.0001
Injection:	10 µL	
Detection:	Shimadzu Prominence, R.I.	
Cell:	10 µL	
Flow Rate:	0.5 mL/min	
Mobile Phase:	Dissolve 3.54 g of ammonium acetate in 500 ml milliQ water. Mix buffer & acetonitrile 20:80 (v/v)	
Temperature:	40 °C (oven), 40 °C (detector cell)	
Diluent	Mobile phase	
	Dissolve 30 mg D-mannose standard in 10 ml volumetric flask.	
Standard:	Dilute upto the mark with diluent.	
Sample:	Pipette out 2.5 ml of suspension into a 50 ml volumetric flask. Add 30 ml of diluent. Sonicate for 10 minutes. Centrifuge the solution at 10000 rpm for 10 minutes. Filter through 0.2 µm filter paper.	
Pressure Drop:	29 Bar(421 psi)	



Chromatographic Data :

No.	Compound	Retention Time (min)	Theoretical Plate	Tailing factor
1	D-Mannose	13.3	5676	1.1