

Materials List for:

Glycan Node Analysis: A Bottom-up Approach to Glycomics

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Materials

Name	Company	Catalog Number	Comments
Sodium hydroxide beads	367176	Sigma-Aldrich	20-40 mesh, reagent grade 97%
0.9 ml Spin column	69705	Pierce division of ThermoFisher Scientific	Includes plugs and polyethylene frits
GC-MS autosampler vial (silanized)*	C4000-9	ThermoFisher Scientific	Target DP High Recovery Vial, 1.5 ml, 12 mm x 32 mm, includes Teflon-lined pierceable caps
1.5 ml polypropylene test tubes	05-402-25	ThermoFisher Scientific	Snap-cap lid
2 ml polypropylene test tubes	05-408-138	ThermoFisher Scientific	Snap-cap lid
Dimethyl Sulfoxide (DMSO)	D8418	Sigma-Aldrich	BioReagent for molecular biology, reagent grade>99.0%
Iodomethane	I8507	Sigma-Aldrich	Contains copper as stabilizer, ReagentPlus 99%
Acetonitrile	A955-4	ThermoFisher Scientific	Optima LC/MS
Microcentrifuge	75002436: Sorvall Legend Micro 17 Centrifuge	ThermoFisher Scientific	24 x 1.5/2.0 rotor with ClickSeal biocontainment lid. Rotor catalog number: 75003424
13 x 100 glass test tube (silanized)*	53283-800	VWR	13 mm x 100 mm borosilicate glass test tubes with screw-cap finish
Caps for glass test tubes	14-930-15D	ThermoFisher Scientific	Kimble™ Black Phenolic Screw Caps; 13 mm-415 GPI thread; PTFE-faced rubber liner.
Sodium chloride	S7653	Sigma-Aldrich	>99.5% pure
Chloroform	4440-08	Macron Fine Chemicals	
Trifluoroacetic acid	299537	Sigma-Aldrich	99% purified by redistillation for protein sequencing
Sodium borohydride	71321	Fluka Analytical	99%
Ammonium hydroxide solution	320145	Sigma-Aldrich	NH ₃ content: 28.0-30.0%
Methanol	AH230-4	Honeywell Burdick & Jackson	HPLC grade
Acetic acid	320099	Sigma-Aldrich	99.70%
Plastic vacuum desiccator	Any model of adequate size	FoodSaver	
Acetic anhydride	539996	Sigma-Aldrich	99.50%
Dichloromethane	D143SK-4	ThermoFisher Scientific	Stabilized HPLC grade
Acetone	9006-03	J.T.Baker	Baker Analyzed
Heated evaporation manifold (main unit)	pi18823	ThermoFisher Scientific	Thermo Scientific* Reacti-Therm* Heating and Stirring Module; Triple-block Model with Heating and Stirring Function
Heated evaporation manifold (overhead evaporator)	pi18826	ThermoFisher Scientific	ThermoScientific* Reacti-Vap Evaporator, 27-port; For use with triple-block Reacti-Therm heating module

Aluminum sample-holder blocks for evaporation manifold	pi18816	ThermoFisher Scientific	Block, Aluminum, Reacti-Block S-1, Holds 13 mm dia test tubes, 13 holes (14 mm dia. x 45 mm deep)
Gas chromatograph	Model A7890	Agilent	Equipped with CTC PAL autosampler
Mass spectrometer	GCT Premier (Time-of-Flight)	Waters	
Split-mode liner (deactivated / silanized)	5183-4647	Agilent	Containing a small plug of silanized glass wool
DB-5ms GC column	122-5532	Agilent	30 m x 0.25 mm ID x 0.25 micron film thickness
Chlorotrimethylsilane	95541	Sigma-Aldrich	
Glass vacuum desiccator (for glassware silanization)	EW-06536-30	Cole-Parmer	12" wide; 230 mm plate size

*Glassware silanization is carried out in-house, overnight using chlorotrimethylsilane vapor in a large glass vacuum desiccator.