Materials List for

Activation and Conjugation of Soluble Polysaccharides using 1-Cyano-4-Dimethylaminopyridine Tetrafluoroborate (CDAP)

Andrew Lees[1], **James Zhou**[1]

[1]Fina Biosolutions LLC

Corresponding Author

Andrew Lees
alees@finabio.com

Citation

Lees, A., Zhou, J. Activation and Conjugation of Soluble Polysaccharides using 1-Cyano-4-Dimethylaminopyridine Tetrafluoroborate (CDAP). *J. Vis. Exp.* (172), e62597, doi:10.3791/62597 (2021).

Date Published

June 14, 2021

DOI

10.3791/62597

URL

jove.com/video/62597

Materials

Name	Company	Catalog Number	Comments
Acetonitrile	Sigma	34851	
Adipic acid dihydrazide	Sigma	A0638	MW 174
Amicon Ultra 15 10 kDa	Millipore	UFC901008	MW cutoff can be 30 kDa for 200 kDa PS
Analytical balance			
Autotitrator or electronic pipet			
Beaker 2-4 L			
CDAP	SAFC	RES1458C	Sigma
DMAP	Sigma	107700	MW 122.2
Flake ice			
HCl 1 M	VWR	BDH7202-1	
Micro stir bar	VWR	76001-878	
Microfuge tube (for CDAP)	VWR	87003-294	
NaCl	VWR	BDH9286	
NaOH 1 M	Sigma	1099130001	
NaOH 10 M	Sigma	SX0607N-6	
pH meter			
pH probe	Cole Parmer	55510-22	6 mm x 110 mm Epoxy single junction
pH temperature probe			
Pipets & tips			
Saline or PBS			
Small beaker 5-20 mL	VWR	10754-696	A 10 mL beaker allows room for pH probe & pipet
Small ice bucket			
Small spatula			
Stir plate			

Resorcinol assay			
Combitip	Eppendorf	10 ml	
DI water			
Dialysis tubing	Repligen	132650T	Spectra/Por 6-8kDa
Dialysis tubing clips	Repligen	142150	
Heating block			
Nitrile gloves	VWR		
Repeat pipettor	Eppendorf	M4	
Resorcinol	Sigma	398047	
Sugar standard		As appropriate	
Sulfuric acid 75%	VWR	BT126355-1L	
Timer			
TNBS assay			
Adipic dihydrazide	Sigma	A0638	MW 174
Borosilcate test tubes 12 x 75	VWR	47729-570	
Sodium borate, 0.5 M pH 9	Boston Biologicals	BB-160	
TNBS 5% w/v	Sigma	P2297	MW 293.17