

Materials List for:

Synthesis of Protein Bioconjugates via Cysteine-maleimide Chemistry

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Materials

Name	Company	Catalog Number	Comments
sodium dihydrogen phosphate	Sigma-Aldrich	71496	
sodium hydroxide	Sigma-Aldrich	71691	
sodium chloride	Sigma-Aldrich	73575	
cytochrome c, from <i>saccharomyces cerevisiae</i>	Sigma-Aldrich	C2436	
dithiothreitol	Sigma-Aldrich	43819	
TSKgel SP-5PW	Sigma-Aldrich	Tosoh SP-5PW, 07161	3.3 ml strong cation exchange column
Amicon Ultra-15	Merck-Millipore	UFC900308	3.5 kDa spin filter
Slide-A-Lyzer mini dialysis units	Thermo Scientific	66333	3.5 kDa dialysis cassettes
Ru(II) bisterpyridine maleimide	Lab made		see ref (14)
acetonitrile	Sigma-Aldrich	A3396	
ethylenediaminetetraacetic acid	Sigma-Aldrich	03609	
tris(2-carboxyethyl)phosphine hydrochloride	Sigma-Aldrich	93284	
imidazole	Sigma-Aldrich	56749	
nickel acetate	Sigma-Aldrich	244066	
AcroSep IMAC Hypercell column	Pall	via VWR: 569-1008	1 ml IMAC column
0.2 micron cellulose membrane filter	Whatman	Z697958	47 mm filter for buffers
0.2 micron PVDF membrane filter	Merck-Millipore	SLGV013SL	syringe filters for proteins
hydrochloric acid	Sigma-Aldrich	84426	Extremely corrosive! Use caution.
caffeic acid	Sigma-Aldrich	60018	MALDI matrix
trifluoroacetic acid	Sigma-Aldrich	91707	extremely corrosive! Use caution
SimplyBlue SafeStain	Thermo Scientific	LC6060	Coomassie blue solution
NuPAGE Novex 12% Bis-Tris Gel	Thermo Scientific	NP0342BOX	precast protein gels
SeeBlue Plus2 Pre-stained Protein Standard	Thermo Scientific	LC5925	premade protein ladder
NuPAGE LDS Sample Buffer (4x)	Thermo Scientific	NP0008	premade gel sample buffer
NuPAGE Sample Reducing Agent (10x)	Thermo Scientific	NP0004	premade gel reducing agent
NuPAGE MES SDS Running Buffer (20x)	Thermo Scientific	NP0002	premade gel running buffer
Voyager DE STR MALDI reflectron TOF MS	Applied Biosystems		
Acta FPLC	GE		Fast Protein Liquid Chromatography

Cary 50 Bio Spectrophotometer	Varian-Agilent		UV-Vis
Milli-Q ultrapure water dispenser	Merck-Millipore		ultrapure water
Low volume UV-Vis Cuvette	Hellma	105-201-15-40	100 microliter cuvette