

Materials List for:

Simple and Efficient Production and Purification of Mouse Myelin Oligodendrocyte Glycoprotein for Experimental Autoimmune Encephalomyelitis Studies

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URL: <https://www.jove.com/video/54727>

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Materials

Name	Company	Catalog Number	Comments
BL21 <i>E. coli</i> - pet32-MOG _{tag}	Kerfoot lab		These bacteria are required to make the MOG _{tag} protein. Glycerol stocks of these bacteria are available upon request.
LB broth miller	Bioshop	LBL407.1	
Ampicillin	bio basic	AB0028	Reconstitute the powder into 50% ethanol/ 50% H ₂ O at 100 mg/ml. Store at -20 °C.
IPTG	Bioshop	IPT002.5	Reconstitute the powder into H ₂ O at 1M and store at -20 °C.
Chicken-egg lysozyme	Bioshop	LYS702.10	Reconstitute in H ₂ O at 50 mg/ml and store at -80 °C.
Triton-X100	Sigma	T-8532	
Phosphate buffered saline	life technologies	20012-027	Commercial phosphate buffered saline is not required, any standard lab made phosphate buffered saline is sufficient.
Sodium chloride	Bioshop	SOD004.1	
Tris-HCl	Bioshop	TRS002.1	
Imidazole	Bioshop	IMD508.100	
Guanidine-HCl	Sigma	G3272	The quality must be greater than 98% purity.
0.5 M EDTA	bioshop	EDT111.500	
Nickel (II) sulfate	Bioshop	NIC700.500	
His bind resin	EMD Millipore	69670-3	Store in 20% ethanol 80% H ₂ O at 4 °C
Anhydrous ethanol	Commercial Alcohols	P016EAAAN	Dilute with water as needed.
Glacial acetic acid	Bioshop	ACE222.1	
Sodium acetate trihydrate	Bioshop	SAA305.500	
bovine serum albumin standard	bio-rad	500-0206	
Bio-rad protein assay dye reagent concentrate	bio-rad	500-0006	
Ethylenediamine tetraacetic acid, disodium salt dihydrate	Fisher scientific	BP120-500	
Tris-base	Bioshop	TRS001.1	
7000 MW Snakeskin dialysis tubing	Thermoscientific	68700	

2-mercaptoethanol	Sigma	M3148-25ml	This reagent should not be handled outside of a fume hood.
AcTEV protease	lifetechnologies	12575-015	Producing your own TEV protease can be accomplished using (https://www.addgene.org/8827/) and purified as in reference 17
Polyethyleneglycol 3350	Bioshop	PEG335.1	
polyethyleneglycol 8000	Bioshop	PEG800.1	
Nunc MaxiSorp flat-bottom 96 well plate	ebioscience	44-2404-21	
Sonicator	Fisher scientific	FB-120-110	
Eon microplate spectrometer	Biotek	11-120-611	This equipment uses the Gen5 data analysis software.
Gen5 data analysis software	BioTek		
sodium dodecyl sulphate	Bioshop	SDS001	
bromophenol blue	Bioshop	BRO777	
Glycerol	Bioshop	GLY001	
Protein desalting columns	Thermoscientific	89849	
Glycine	Bioshop	GLN001	
precast 12% polyacrylamide gel	bio-rad	456-1045	
Rapid stain reagent	EMD Millipore	553215	
Gel dock EZ imager	bio-rad	1708270	
White Light Sample Tray	bio-rad	1708272	Used along with gel dock EZ imager for coomassie blue stains
Protein ladder	bio-rad	1610375	