

Materials List for:

Expression, Isolation, and Purification of Soluble and Insoluble Biotinylated Proteins for Nerve Tissue Regeneration

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Materials

Name	Company	Catalog Number	Comments
1,4-Dithio-DL-threitol, DTT, 99.5%	Chem-Impex International	127	100 g
2-Hydroxyethylmercaptan β -Mercaptoethanol	Chem-Impex International	642	250 ml
Acetic acid, glacial	EMD	AX0073-9	2.5 L
Agar	Bioshop	AGR001.500	500 g
Ampicillin sodium salt	Sigma-Aldrich	A9518	25 g
Antifoam 204	Sigma-Aldrich	A6426	500 g
Barstar-NGF pET-21a(+)	GenScript USA Inc.		4 μ g
BL21(DE3) Competent Cells	Novagen	69450	1 ml; Expression Host
Bradford reagent	Sigma-Aldrich	B6916	500 ml
BugBuster	Novagen	70922-3	100 ml
Gel filtration standard	Bio-Rad	151-1901	6 vials
Glycerol	Bioshop	GLY001.1	1 L
Guanidine hydrochloride amioformamide hydrochloride	Chem-Impex International	152	1 kg
His-Pur Ni-NTA Resin	Thermo Scientific	88222	100 ml
Hydrochloric acid	EMD	HX0603-3	2.5 L
Imidazole	Chem-Impex International	418	250 g
IPTG	Chem-Impex International	194	100 g
Laemmli sample buffer	Bio-Rad	161-0737	30 ml
Lauryl sulfate sodium salt, Sodium dodecyl surface	Chem-Impex International	270	500 g
LB Broth	Sigma-Aldrich	L3022	1 kg
NovaBlue Competent Cells	Novagen	69825	1 ml; Cloning Host
Phosphate buffered saline	Sigma-Aldrich	P5368-10PAK	10 pack
Potassium Chloride	Chem-Impex International	01247	1 kg
Sema3A-pET-21a(+)	GenScript USA Inc.		4 μ g
SimplyBlue SafeStain	Invitrogen	LC6060	1 L
Sodium chloride	Sigma-Aldrich	S5886-1KG	1 kg
Sodium hydroxide	Fisher Scientific	S318-500	500 g
Sodium phosphate diabasic	Sigma-Aldrich	S5136-500G	500 g
Sodium phosphate monobasic	Sigma-Aldrich	S5011	500 g
Terrific Broth	Bioshop	TER409.5	5 kg
Tetracycline hydrochloride	Chem-Impex International	667	25 g
Tris/Glycine/SDS Buffer, 10x	Bio-Rad	1610732	1 L

Trizma Base	Sigma-Aldrich	T1503	1 kg
Tryptone, pancreatic	EMD	1.07213.1000	1 kg
Yeast extract, granulated	EMD	1.03753.0500	500 g
ÄKTApurifier10	GE Healthcare	28-4062-64	Includes kits and accessories
Benchtop Orbital Shaker	Thermo Scientific	SHKE4000	MAXQ 4000
BirA500	Avidity	BirA500	Enzyme comes with reaction buffers and biotin solution
Dialysis Casette	Thermo Scientific	66380	Slide-A-Lyzer (Extra Strength)
Dialysis Tubing	Spectrum Laboratories	132127, 132129	MWCO: 25,000 and 50,000
Flow Diversion Valve FV-923	GE Healthcare	11-0011-70	
FluoReporter Biotin Quantification Assay Kit	Invitrogen	1094598	
Frac-950 Tube Racks, Rack C	GE Healthcare	18-6083-13	
Fraction Collector Frac-950	GE Healthcare	18-6083-00	Includes kits and accessories
Heated/Refrigerated Circulator	VWR	13271-102	Model 1156D
Heating Oven FD Series	Binder		Model FD 115
HiLoad 16/60 Superdex 200 pg	GE Healthcare	17-1069-01	Discontinued--Replacement Product: HiLoad 16/600 Superdex 200 pg
J-26 XPI Avanti Centrifuge	Beckman Coulter	393126	
JA 25.50 Rotor	Beckman Coulter	363055	
JLA 8.1 Rotor	Beckman Coulter	969329	Includes 1 L polypropylene bottles
JS 5.3 Rotor	Beckman Coulter	368690	
Laminar Flow Hood	Thermo Scientific	1849	Forma 1800 Series Clean Bench
Microplate Reader	TECAN		infinite M200
Mini-PROTEAN Tetra Cell	Bio-Rad	165-8004	4-gel vertical electrophoresis system
Mini-PROTEAN TGX Precast Gels	Bio-Rad	456-9036	Any kDa, 15-well comb
Ni-NTA Column	Bio-Rad	737-2512	49 ml volume ECONO-Column
Plasmid Miniprep Kit	Omega Bio-Tek	D6943-01	
PowerPac HC Power Supply	Bio-Rad	164-5052	250 V, 3 A, 300 W
Round Bottom Polypropylene Copolymer Tubes	VWR	3119-0050	50 ml tubes for JA 25.50 rotor
Spin-X UF Concentrators	Corning	431488, 431483	20 and 6 ml; MWCO: 10,000 Da
Subcloning Service	GenScript USA Inc.		Protein Services
Ultrasonic Processor	Cole-Parmer	18910445A	Model CV18
Vortex-Genie 2	Scientific Industries	SI-0236	Model G560