

Materials List for:

Purification of Human S100A12 and Its Ion-Induced Oligomers for Immune Cell Stimulation

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Materials

Name	Company	Catalog Number	Comments
pET11b vector	Novagen		
BL21(DE3) competent E. coli	New England Biolabs	C2527	
100 x Non-essential amino acids	Merck	K 0293	
25% HCl	Carl Roth	X897.1	
4–20% Mini-PROTEAN TGX Protein Gels	BioRad	4561093	
Ampicillin sodium salt	Carl Roth	HP62.1	
BS3 (bis(sulfosuccinimidyl)suberate) - 50 mg	ThermoFisher Scientific	21580	
Calciumchlorid Dihydrat	Carl Roth	5239.1	
Coomassie Brilliant Blue R250 Destaining Solution	BioRad	1610438	
Coomassie Brilliant Blue R250 Staining Solution	BioRad	1610436	
EasySep Human Monocyte Enrichment Kit	Stemcell	19059	Magnetic negative cell isolation kit
EDTA disodium salt dihydrate	Carl Roth	8043.1	
EGTA	Carl Roth	3054.3	
EndoLISA	Hyglos	609033	Endotoxin detection assay
Endotoxin-Free Ultra Pure Water	Sigma-Aldrich	TMS-011-A	Ultrapure water for preparation of endotoxin-free buffers
EndoTrap red	Hyglos	321063	Endotoxin removal resin
FBS (heat-inactivated)	Gibco	10270	
HBSS, no calcium, no magnesium	ThermoFisher Scientific	14175053	
Hepes	Carl Roth	9105	
Hepes (high quality, endotoxin testet)	Sigma-Aldrich	H4034	
hTNF-alpha - OptEia ELISA Set	BD	555212	
IPTG (isopropyl-β-D-thiogalactopyranosid)	Carl Roth	CN08.1	
L-Glutamine (200 mM)	Merck	K 0282	
LB-Medium	Carl Roth	X968.1	
Lipopolysaccharides from E. coli O55:B5	Merck	L6529	
Pancoll, human	PAN Biotech	P04-60500	Separation solution (density gradient centrifugation)

Penicillin/Streptomycin (10.000 U/ml)	Merck	A 2212	
Phenyl Sepharose High Performance	GE Healthcare	17-1082-01	Resin for hydrophobic interaction chromatography
Polymyxin B	Invivogen	ttrl-pmb	
Protease inhibitor tablets	Roche	11873580001	
Q Sepharose Fast Flow	GE Healthcare	17-0510-01	Resin for anion-exchange chromatography
RoboSep buffer	Stemcell	20104	Cell separation buffer (section 5.1.4)
RPMI 1640 Medium	Merck	F 1215	
Sodium chloride (NaCl)	Carl Roth	3957.2	
Sodium hydroxide	Carl Roth	P031.1	
Tris Base	Carl Roth	4855.3	
Zinc chloride	Carl Roth	T887	
Labware			
0,45 µm syringe filter	Merck	SLHA033SS	
14 mL roundbottom tubes	BD	352059	
2 L Erlenmyer flask	Carl Roth	LY98.1	
24 well suspension plates	Greiner	662102	
5 L measuring beaker	Carl Roth	CKN3.1	
50 mL conical centrifuge tubes	Corning	430829	
50 mL high-speed centrifuge tubes	Eppendorf	3,01,22,178	
Amicon Ultra-15 Centrifugal Filter Unit MWCO 3 kDa	Merck	UFC900324	
Amicon Ultra-15 Centrifugal Filter Unit MWCO 50 kDa	Merck	UFC905024	
Culture dish (100 mm)	Sarstedt	83.3902	
Dialysis Tubing Closures	Spectrum	132738	
EasySep magnet 'The Big Easy'	Stemcell	18001	
Fraction collector tubes 5 mL	Greiner	115101	
Lumox film, 25 µm, 305 mm x 40 m	Sarstedt	94,60,77,316	Film for monocyte culture plates
Spectra/Por Dialysis Membrane (3.5 kDa)	Spectrum	132724	
Steritop filter unit	Merck	SCGPT01RE	
Equipment			
37 °C Incubator (with shaking)	New Brunswick Scientific	Innova 42	
ÅKTA purifier UPC 10	GE Healthcare		FPLC System
Fraction collector	GE Healthcare	Frac-920	
Centrifuge (with rotor A-4-81)	Eppendorf	5810R	
Fixed angle rotor	Eppendorf	F-34-6-38	
Mini Protean Tetra Cell	BioRad	1658000EDU	
NanoPhotometer	Implen	P330	
Sonicator	Brandelin	UW2070	
Fluorescence reader	Tecan	infinite M200PRO	
pH meter	Knick	765	