

Materials List for:

# Synthesis of Monocyte-targeting Peptide Amphiphile Micelles for Imaging of Atherosclerosis

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## Materials

Name	Company	Catalog Number	Comments
1,2-ethanedithiol	VWR	E0032	for peptide synthesis
10 mL disposable serological pipets	VWR	89130-898	for cell culture
15 mL centrifuge tubes, polypropylene	VWR	89401-566	for various applications
2,5-dihydroxybenzoic acid, 99%	Fisher Scientific	AC165200050	for MALDI
25 mL disposable serological pipets	VWR	89130-900	for cell culture
2-Mercaptoethanol, 50 mM	ThermoFisher Scientific	31350010	for cell culture
5 mL disposable serological pipets	VWR	89130-896	for cell culture
50 mL centrifuge tubes	VWR	89039-658	for various applications
75 cm <sup>2</sup> culture flask	Fisher Scientific	13-680-65	for cell culture
75 mL reaction vessel	Protein Technologies	3000005	for peptide synthesis
96-wells cell culture plate	VWR	40101-346	for MTS assay
Acetonitrile, HPLC grade	Fisher Scientific	A998SK-4	for HPLC purification
Borosilicate glass, 1 dram	VWR	66011-041	for PAM synthesis
Borosilicate glass pipet, Long tips	VWR	14673-043	for various applications
Coverslip, 0.16-0.19 mm, 22 x 22 mm	Fisher Scientific	12-542B	for confocal microscopy
Cy5 amine	Abcam	ab146463	for peptide conjugation
Diethyl ether, ACS grade	Fisher Scientific	E138-1	for peptide precipitation
Disposable syringes, 20 mL	Fisher Scientific	14-817-54	for HPLC purification
Double neubauer ruled hemocytometer	VWR	63510-13	for cell counting
DSPE-PEG(2000) amine	Avanti	880128P	for peptide conjugation
DSPE-PEG(2000) maleimide	Avanti	880126P	for peptide conjugation
DSPE-PEG(2000)-NHS ester	Nanocs	PG2-DSNS-10K	for conjugation to Cy5
Dulbecco's modified eagle medium-high glucose	Sigma Aldrich	D5796-500ML	for cell culture
Fetal bovine serum, qualified, heat inactivated	ThermoFisher Scientific	10438026	for cell culture
Fmoc-L-Ala-OH /HBTU	Protein Technologies	PS3-H5-A	for peptide synthesis
Fmoc-L-Arg(Pbf)-OH /HBTU	Protein Technologies	PS3-H5-RBF	for peptide synthesis
Fmoc-L-Asn(Trt)-OH /HBTU	Protein Technologies	PS3-H5-NT	for peptide synthesis
Fmoc-L-Cys(Trt)-OH /HBTU	Protein Technologies	PS3-H5-CT	for peptide synthesis
Fmoc-L-Gln(Trt)-OH /HBTU	Protein Technologies	PS3-H5-QT	for peptide synthesis

Fmoc-L-Ile-OH /HBTU	Protein Technologies	PS3-H5-I	for peptide synthesis
Fmoc-L-Leu-OH /HBTU	Protein Technologies	PS3-H5-L	for peptide synthesis
Fmoc-L-Lys(Boc)-OH /HBTU	Protein Technologies	PS3-H5-KBC	for peptide synthesis
Fmoc-L-Phe-OH /HBTU	Protein Technologies	PS3-H5-F	for peptide synthesis
Fmoc-L-Ser(tBu)-OH /HBTU	Protein Technologies	PS3-H5-SB	for peptide synthesis
Fmoc-L-Thr(tBu)-OH /HBTU	Protein Technologies	PS3-H5-TB	for peptide synthesis
Fmoc-L-Tyr(tBu)-OH /HBTU	Protein Technologies	PS3-H5-YB	for peptide synthesis
Fmoc-L-Val-OH /HBTU	Protein Technologies	PS3-H5-V	for peptide synthesis
Fmoc-Lys(Boc)-wang resin, 100-200 mesh	Novabiochem	856013	for peptide synthesis
Formic acid, optima LC/MS grade	Fisher Scientific	A117-50	for HPLC purification
Glycerol	VWR	M152-1L	for confocal microscopy
Hand tally counter	Fisher Scientific	S90189	for cell counting
Magnetic stir bars, egg-shaped	VWR	58949-006	for peptide conjugation
Methanol, ACS certified	Fisher Scientific	A412-4	for PAM synthesis
MTS cell proliferation colorimetric assay kit	VWR	10191-104	for MTS assay
N,N-Dimethylformamide, sequencing grade	Fisher Scientific	BP1160-4	for peptide synthesis
N-Methylmorpholine	Protein Technologies	S-1L-NMM	for peptide synthesis
Paraformaldehyde	Fisher Scientific	AC416780250	for fixing cells
PBS, pH 7.4	ThermoFisher Scientific	10010049	for various applications
Penicillin/streptomycin, 10,000 U/ mL	ThermoFisher Scientific	15140122	for cell culture
Peptide synthesis vessel, 25 mL	Fisher Scientific	CG186011	for peptide synthesis
Phosphotungstic acid	Fisher Scientific	A248-25	for TEM
Piperidine	Spectrum	P1146-2.5LTGL	for peptide synthesis
Plain glass microscope slide 75 x 25 mm	Fisher Scientific	12-550-A3	for confocal microscopy
Reagent reservoirs, sterile	VWR	95128093	for cell culture
Self-closing tweezer	TedPella	515	for TEM
TEM support film	TedPella	01814F	for TEM
Trifluoroacetic acid	Fisher Scientific	BP618-500	for peptide cleavage and HPLC purification
Triisopropylsilane	VWR	TCT1533-5ml	for peptide cleavage
Trypan blue solution, 0.4%	ThermoFisher Scientific	15250061	for cell counting
Tweezer, general purpose-serrated	VWR	231-SA-SE	for confocal microscopy
WEHI-274.1	ATCC	ATCC CRL-1679	murine monocyte
automated benchtop peptide synthesizer	Protein Technologies		PS3 Benchtop Peptide Synthesizer
$\alpha$ - cyano- 4- hydroxycinnamic acid, 99%	Sigma Aldrich	476870-2G	for MALDI