

Materials List for:

Microwave-assisted Functionalization of Poly(ethylene glycol) and On-resin Peptides for Use in Chain Polymerizations and Hydrogel Formation

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Materials

Name	Company	Catalog Number	Comments
3,6-Dioxa-1,8-octanedithiol	Tokyo Chemical Industry Co, LTD	D2649	CAS 14970-87-7
Acetonitrile	J.T. Baker	UN1648	CAS 75-05-8
Amino Acids	AAPPTech	Glycine: AFG101	CAS 29022-11-5
		Arginine: AFR105	CAS 154445-77-9
		Asparagine: AFD105	CAS 71989-14-5
		Serine: AFS105	CAS 71989-33-8
Anhydrous diethyl ether	Fisher Scientific	UN1155	CAS 60-29-7
Citric acid	Sigma Aldrich	C1857	CAS 77-92-9
Deuterated chloroform	Cambridge Isotope Laboratories Inc.	DLM-7-100	CAS 865-49-6
Dichloromethane	Fisher Scientific	UN1593	CAS 75-09-2
Diisopropylethylamine	Alfa Aesar	A1181	CAS 7087-68-5
Dimethylformamide	Fisher Scientific	D119-4	CAS 68-12-2
Fmoc-Gly-Wang resin	Peptides International	RGF-1301-PI	100-200 mesh size
Methacrylic anhydride	Alfa Aesar	L14357	CAS 760-93-0
N-Methylpyrrolidone	VWR	BDH1141-4LG	CAS 872-80-4
On-resin peptides	Synthesized in-house		On-resin peptides can also be purchased from Peptides International, GenScript, AAPPTec, etc.
O-Benzotriazole-N,N,N',N'-tetramethyl-uronium-hexafluorophosphate	AnaSpec Inc	510/791-9560	CAS 94790-37-1
Peptide Calibration Standard	Care	206195	
Piperazine	Alfa Aesar	A15019	CAS 11-85-0
Poly(ethylene glycol) 2 kDa linear	Alfa Aesar	B22181	CAS 25322-68-3
Poly(ethylene glycol) 10 kDa linear	Alfa Aesar	B21955	
Poly(ethylene glycol) 20 kDa linear	Sigma Aldrich	81300	JenKem Technologies USA is an alternate supplier of linear and multi-arm PEG
Thioanisole	Alfa Aesar	L5464	CAS 100-68-5
Trifluoroacetic acid	Alfa Aesar	A12198	CAS 76-05-1
Triisopropylsilane	Alfa Aesar	L09585	CAS 6485-79-6
α-Cyano-4-hydroxycinnamic acid	Tokyo Chemical Industry Co, LTD	C1768	CAS 28166-41-8