

Materials List for:

The Determination of Protease Specificity in Mouse Tissue Extracts by MALDI-TOF Mass Spectrometry: Manipulating PH to Cause Specificity Changes

Hiroyuki Yamamoto¹, Yoshikazu Sawaguchi², Michio Kimura¹

¹Department of Microbiology and Molecular Cell Biology, Nihon Pharmaceutical University

²Department of Clinical Pharmaceutics, Nihon Pharmaceutical University

Correspondence to: Hiroyuki Yamamoto at yamamoto@nichiyaku.ac.jp

URL: <https://www.jove.com/video/57469>

DOI: [doi:10.3791/57469](https://doi.org/10.3791/57469)

Materials

Name	Company	Catalog Number	Comments
Fmoc-NH-SAL Resin(-[2,4-Dimethoxyphenyl-N-(9-fluorenylmethoxycarbonyl)aminomethyl]phenoxy resin)	Watanabe Chemical Co., Ltd.	A00102	
N,N-dimethylformamide (DMF)	Watanabe Chemical Co., Ltd.	A00185	
piperidine	Watanabe Chemical Co., Ltd.	A00176	
trinitrobenzenesulfonic acid (TNBS)	WAKO Chemical	209-1483	
O-(6-Chloro-1H-benzotriazol-1-yl)-N,N,N',N'-tetramethyluronium hexafluorophosphate (HCTU)	Watanabe Chemical Co., Ltd.	A00067	
1-Hydroxy-1H-benzotriazole,monohydrate (HOBt)	Watanabe Chemical Co., Ltd.	A00014	
diisopropylethylamine (DIPEA)	Watanabe Chemical Co., Ltd.	A00030	
triisopropylsilane (TIS)	Watanabe Chemical Co., Ltd.	A00170	
ethanedithiol (EDT)	Watanabe Chemical Co., Ltd.	A00057	
trifluoroacetic acid (TFA)	Millipore	S6612278 403	
acetonitrile	Kokusan Chemical	2153025	
C18 cartridge column	Waters	WAT051910	
poly(oxyethylene) octylphenyl ether	WAKO Chemical	168-11805	Triton X-100
mixing homogenizer	Kinematica	PT3100	polytron homogenizer
Coomassie Brilliant Blue (CBB) - G250	Nakarai Chemical	094-09	
glycerol	Nakarai Chemical	170-18	
N-tosyl-L-phenylalanine chloromethyl ketone (TPCK)-trypsin	Sigma-Aldrich	T1426	
dimethyl sulfoxide (DMSO)	WAKO Chemical	043-07216	
streptavidin sepharose	GE Healthcare	17-511-01	
ZipTipC18	Millipore	ZTC18S096	
α-cyano-4-hydroxycinnamic acid (CHCA)	Sigma-Aldrich	C2020	
MALDI-TOF mass spectrometry	Bruker Daltonics, Germany	autoflex	
2-iminobiotin	Sigma-Aldrich	I4632	
Fmoc-amino acids	Watanabe Chemical Co., Ltd.		