

Materials List for:

# Modeling Amyloid- $\beta$ 42 Toxicity and Neurodegeneration in Adult Zebrafish Brain

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## Materials

Name	Company	Catalog Number	Comments
Fmoc-protected amino acids	IRIS Biotech GmbH (Marktredwitz, Germany)		Fmoc-based amino acids for solid phase peptide synthesis (SPPS)
N,N,N',N'-Tetramethyl-O-(1H-benzotriazol-1-yl)uronium hexafluorophosphate (HBTU)	IRIS Biotech GmbH (Marktredwitz, Germany)	RL-1030	Activator
Oxyma	IRIS Biotech GmbH (Marktredwitz, Germany)	RL-1180	Racemization suppressor
N,N-Diisopropylethylamine	IRIS Biotech GmbH (Marktredwitz, Germany)	SOL-003	Base
Dimethylformamide	IRIS Biotech GmbH (Marktredwitz, Germany)	SOL-004	Solvent
N-Methylmorpholine	Thermo Fisher (Kandel) GmbH, Germany	A12158	Base
1-Hydroxybenzotriazole hydrate (HOBT)	Sigma-Aldrich Co. LLC. (St. Louis, MO, USA)	157260 ALDRICH	Activator
Piperidine	MERCK KGaA (Darmstadt, Germany)	822299	Fmoc deprotection reagent
Dichloromethane (DCM)	MERCK KGaA (Darmstadt, Germany)	106050	Solvent
Formic acid (FA)	MERCK KGaA (Darmstadt, Germany)	100264	Buffer component for HPLC
Trifluoroacetic acid (TFA)	MERCK KGaA (Darmstadt, Germany)	808260	Cleavage Mixture reagent
Triisopropylsilane(TIS)	MERCK KGaA (Darmstadt, Germany)	233781 ALDRICH	Cleavage Mixture reagent
Acetonitrile (for UPLC/LCMS)	Sigma-Aldrich Laborchemikalien GmbH	34967-1L	Solvent
Acetonitrile (for HPLC)	VWR International Ltd, England	83639.320	Solvent
Diethylether	VWR International Ltd, England	23811.326	Solvent for peptide precipitation
Dithiothritol (DTT)	VWR International Ltd, England	0281-25G	Cleavage Mixture reagent
TentaGel S RAM Fmoc rink amide resin	Rapp Polymere GmbH (Tuebingen, Germany)	S30023	Solid phase for SPPS
Peptide synthesis 5 ml syringes with included filters	Intavis AG (Cologne, Germany)	34.274	Reaction tube for SPPS and for cleavage from the Solid Phase
Polytetrafluoroethylene (PTFE) filter	Sartorius Stedtim (Aubagne, France)	11806-50-N	Filtration of precipitated peptides
Polyvinylidene fluoride (PVDF) syringe filter	Carl Roth GmbH + Co. KG Karlsruhe	KC78.1	Pre-filtration for HPLC

Peptide Synthesizer	Intavis, Cologne, Germany	ResPep SL	Automated solid-phase peptide synthesizer
Water Alliance HPLC	Waters, Milford Massachusetts, USA	Waters 2998, Waters e2695	Semi-preparative reverse-phase high pressure liquid chromatography (HPLC)
PolymerX, bead size 10µm, 250x10 mm	Phenomenex Ltd. Germany	00G-4328-N0	Porous polystyrene divinylbenzene HPLC column
Milli-Q Advantage A10, with a Milli-Q filter	EMD Millipore Corporation, Billerica, MA, USA	LCPAK0001	Water purification system
Filtration Unit	Sartorius Stedtim (Aubagne, France)	16307	Filtration unit for peptide precipitation
UPLC Aquity with UV Detector	Waters, Milford Massachusetts, USA	M09UPA 664M	Analytical reverse phase ultra HPLC for LC-MS
ACQUITY UPLC BEH C18, bead size 1.7 µm, 50x2.1 mm	Waters, Milford Massachusetts, USA	186002350	Analytical C18 column
ACQUITY TQ Detector	Waters, Milford Massachusetts, USA	QBB908	Electrospray ionization mass spectrometry (ESI-MS)
CHRIST ALPHA 2-4 LD plus + vacuubrand RZ6	Martin Christ Gefriertrocknungsanlagen GmbH, Germany	16706, 101542	Lyophilizer with vacuum pump
Paradigm plate reader	Beckman Coulter		
MESAB (ethyl-m-aminobenzoate methanesulphonate)	Sigma-Aldrich	A5040	
Petri dishes	Sarstedt	821.472	
Phosphate-buffered saline	Life Technologies, GIBCO	10010-056	
Needle	Becton-Dickinson	305178	
Dissecting microscope	Olympus, Leica, Zeiss	Varies with the manufacturer	
Dumont Tweezers	World Precision Instruments	501985	
Gillies Dissecting Forceps	World Precision Instruments	501265	
Glass injection capillaries	World Precision Instruments	TWF10	
PicoNozzle	World Precision Instruments	5430-12	
Pneumatic PicoPump	World Precision Instruments	SYS-PV820	
Ring illuminator; Ring Light Guide	Parkland Scientific	ILL-RLG	
Cryostat	Leica	CM1950	