Materials List for: Stereotaxic Infusion of Oligomeric Amyloid-beta into the Mouse Hippocampus

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Materials

Name	Company	Catalog Number	Comments
Ketamine HCI (100 mg/ml)	Henry Schein Medical	1049007	100 mg ketamine per 1 kg animal
Xylazine (20 mg/ml)	Henry Schein Medical	not available	10 mg xylazine per 1 kg animal
Buprenex (0.3 mg/ml)	Henry Schein Medical	1217793	0.1 mg buprenex per 1 kg animal
Αβ ₁₋₄₂	David Teplow/UCLA	not available	100 μ M; This amyloid was used in the paper
Αβ ₁₋₄₂	Bachem	H-1368	Can be used in place of amyloid from the Teplow lab
Αβ ₁₋₄₂	American Peptide	62-0-80B	Can be used in place of amyloid from the Teplow lab
Scrambled $A\beta_{1-42}$	American Peptide	62-0-46B	Can be used as control peptide for comparing Aβ1-42
NU4 Antibody (Oligomeric Amyloid Antibody)	Gift from William Klein/ Northwestern U.	not available	1:2,000 dilution
Anti-Amyloid Oligomeric Antibody (Polyclonal Rabbit)	EMD Millipore	AB9234	May be used in place of Nu4; needs to be tested by the end use
6E10 Antibody (Monoclonal Mouse) (Amyloid Antibody)	Biolegend	sig-39320	1:1,000 dilution
ChAT Antibody (Polyclonal Goat)	Millipore	AB144P	1:100 dilution
DeadEnd Fluorometric TUNEL system	Promega	G3250	Follow manufacturer's directions for use
Prolong Gold Antifade Reagent with DAPI	Invitrogen	P36935	Use when coverslipping slides
Fluorogold	Fluorochrome, LLC	not available	2% solution
Absolute Ethanol (200 proof)	Fisher Scientific	BP2818-4	For making 70% ethanol for sanitizing and disinfecting
Novex 10-20% Tricine gel	Life Technologies	EC6625BOX	For separating Aβ1-42
Novex Tricine SDS Running Buffer (10X)	Life Technologies	LC1675	For running 10-20% Tricine gels
Novex Tris-Glycine Transfer Buffer (25X)	Life Technologies	LC3675	For transferring 10-20% Tricine gels
SuperSignal Western Blot Enhancer	Thermo Scientific	46640	For enhancing Aβ1-42 signal; follow manufacturer's protocol
Protran BA79 Nitrocellulose Blotting Membrane, 0.1 μm	GE Healthcare Life Sciences	10402088	For transferring 10-20% Tricine gels
Xcell SureLock Mini-Cell	Life Technologies	EI0001	Electrophoresis aparatus for running 10-20% Tricine gels
GenTeal Lubricant Eye Gel	Novartis	not available	For keeping the mouse eyes moist during surgery; can be found in local pharmacy stores

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Refresh Optive Lubricant Eye Drops	Allergan	not available	For keeping the mouse eyes moist during surgery; can be found in local pharmacy stores; Can be used in place of GenTeal
Betadine	Stoelting	50998	For sanitizing and disinfecting
Round/Tapered Spatula	VWR	82027-490	For opening animal mouth
Bulldog Serrefines Clamps (Jaw Dims. 9X1.6 mm; Length 28 mm)	Fine Science Tools	18050-28	Optional; For keeping scalp skin apart during injection
Straight Fine Scissors (Cutting edge 25 mm; Length 11.5 cm)	Fine Science Tools	14060-11	For cutting scalp
#3 Scalpel Handle	Fine Science Tools	10003-12	
#11 Surgical Blade	Fine Science Tools	10011-00	For making scalp incision
Student Standard Pattern Forcep (Tip Dims. 2.5x1.5 mm; Length 11.5 cm)	Fine Science Tools	91100-12	For holding scalp closed during suturing
Trimmer Combo Kit	Kent Scientific	CL9990-1201	For shaving hair
T/Pump Warm Water Recirculator	Kent Scientific	TP-700	For warming animal during surgery
Resusable Warmining Pad (5" x 10")	Kent Scientific	TPZ-0510FEA	For attaching it to the T/Pump warm water recirculator to warm the animal during surgery
Cordless Micro Drill	Stoelting	58610	Use 0.8 mm steel burrs to drill holes in the skull
Lab Standard Stereotaxic Instrument with Mouse & Neonatal Rat Adaptor	Stoelting	51615	
Just for Mouse Stereotaxic Instrument	Stoelting	51730	Can use this in place of Stoelting Cat. #51615
Quintessential Stereotaxic Injector	Stoelting	53311	
Dry Glass Bead Sterilizer	Stoelting	50287	For sterilizing stainless steel instruments
Sterile Surgical Drape (18" x 26")	Stoelting	50981	
Hamilton Syringe 50 ml, Model 705 RN SYR, NDL	Hamilton Company	7637-01	For brain injection; use different syringes for different solutions
29 G Needle, Small Hub RN NDL	Hamilton Company	7803-06	For attaching to the Hamilton syringe for brain injection
1 ml BD Tuberculin Syringes	VWR	BD309659	For administering anesthesia and saline
30 G Needle (0.5")	VWR	BD305106	For administering anesthesia and saline
Portable Electronic CS Series Scale (Ohaus)	VWR	65500-202	For weighing animals to determine anesthesia dose
Hot plate (Top Plate Dims. 7.25x7.25 in)	VWR	47751-148	For warming animals post-surgery
Sofsilk Silk Suture C-1 Cutting 3/8, 12 mm	Covidien	S1173	For closing wound
Vetbond Tissue Adhesive (3M)	Santa Cruz Biotechnology	sc-361931	Optional: for aiding in wound closure; Use with suture.
Cotton-Tipped Wooden-Shaft Sterile Applicators	Fisher scientific	22-029-488	For cleaning and drying surgical wound
Fisherbrand Superfrost Plus Microscope Slides	Fisher Scientific	12-550-15	For collecting brain sections
VWR Micro Cover Glass 24 X 50 mm	VWR	48393241	For mounting microscope slides



Thermo Scientific Nalgene Syringe Filter 0.2 µm	Fisher Scientific	194-2520	For sterilizing saline solution
Sterile dual tip skin markers by Viscot Medical	Medline	VIS1422SRL91	For marking coordinates on the skull