

Materials List for:

Immunohistochemistry and Multiple Labeling with Antibodies from the Same Host Species to Study Adult Hippocampal Neurogenesis

Anne Ansgor^{*1}, Katja Bornkessel^{*1}, Otto W. Witte¹, Anja Urbach¹

¹Hans Berger Department of Neurology, Jena University Hospital

*These authors contributed equally

Correspondence to: Anja Urbach at anja.urbach@med.uni-jena.de

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Materials

Name	Company	Catalog Number	Comments
<i>Thymidine analog administration</i>			
5-Bromo-2'-deoxyuridine, BrdU	Sigma-Aldrich	B9285	toxic (mutagenic, teratogenic)
5-Chloro-2'-deoxyuridine, CldU	Sigma-Aldrich	C6891	toxic (mutagenic, teratogenic)
5-Chloro-2'-deoxyuridine, CldU	MP Biomedicals	2105478	toxic (mutagenic, teratogenic)
5-Iodo-2'-deoxyuridine, IdU	MP Biomedicals	2100357	toxic (mutagenic, teratogenic)
<i>Tissue preparation</i>			
Isoflurane-Actavis	Piramal Healthcare	700211	
Paraformaldehyde powder (PFA)	Riedel-De Hæn	16005	toxic, flammable
Perfusion pump PD5206	Heidolph Instruments	523-52060-00	
Masterflex Tygon lab tubing, Ø 0.8 mm	Thermo Fischer Scientific	06409-13	
Feeding needle, straight, 21 G, 1.75 mm olive tip, 40 mm	Agnthos	1036	
Freezing microtome Microm HM 400	Thermo Fischer Scientific		
24-well Cell culture multiwell plates	Greiner Bio-One	662160	
<i>Immunohistochemistry</i>			
Tefal vitacuisine steamer	Tefal	VS 4001	
Netwell 24 mm polyester mesh membrane inserts	Corning	3479	pre-loaded in 6-well culture plates
Netwell 15 mm polyester mesh membrane inserts	Corning	3477	pre-loaded in 12-well culture plates
Netwell plastic 6-well carrier kit	Corning	3521	for 24 mm polyester mesh membrane inserts
Netwell plastic 12-well carrier kit	Corning	3520	for 15 mm polyester mesh membrane inserts
Vectastain Elite ABC kit	Vector Laboratories	PK-6100	
DAB (3,3'-Diaminobenzidine tetrahydrochloride hydrate)	Sigma-Aldrich	D-5637	carcinogenic, light sensitive
Fluoromount-G	SouthernBiotech	0100-01	
<i>Primary antibodies</i>			
Rabbit IgG1 α-Ki67	Novocastra/ Leica Biosystems	NCL-L-Ki67MM1	DAB 1:400/IF 1:100; requires epitope retrieval
Rabbit α-GFAP, AS-3-GF	Synaptic Systems	173 002	1:500
Goat IgG (H+L) α-GFP	Acris Antibodies	R1091P	1:300
Mouse IgG1 α-nestin	Abcam	ab6142	1:200; requires epitope retrieval

Guinea pig IgG (H+L) α -Doublecortin	Merck Millipore	AB2253	1:500
Rat IgG2a α -BrdU (ascites)	AbD Serotec/ Bio-Rad	OBT0030CX	for detection of BrdU; DAB 1:500/ IF 1:400
Rat IgG2a α -BrdU (purified)	AbD Serotec/ Bio-Rad	OBT0030	for detection of CldU; DAB 1:500/IF 1:250-400
Mouse IgG1 α -NeuN	Merck Millipore	MAB377	1:500
mouse IgG1k α -BrdU	BD Biosciences	347580	For detection of IdU; DAB 1:500/IF 1:350
<i>Secondary antibodies</i>			
Donkey α -guinea pig IgG (H+L)-Biotin	Dianova	711-065-152	1:500
Donkey α -rat IgG (H+L)-Biotin	Dianova	712-065-150	1:500
Donkey α -mouse IgG (H+L)-Biotin	Dianova	715-065-151	1:500
Goat α -rat IgG (H+L)-Alexa Fluor 488	Molecular Probes	A11006	1:250
Donkey α -goat IgG (H+L)-Alexa Fluor 488	Molecular Probes	A11055	1:250
Donkey α -mouse IgG (H+L)-FITC, Fab-Fragment	Dianova	715-097-003	1:100
Donkey α -mouse IgG (H+L)-Alexa Fluor 647	Dianova	715-605-151	1:250
Donkey α -guinea pig IgG (H+L)-Alexa Fluor 647	Dianova	706-605-148	1:250
Donkey α -rat IgG (H+L)-Rhodamine Red-X	Dianova	712-295-150	1:250
Donkey α -rabbit IgG (H+L)-Rhodamine Red-X	Dianova	711-295-152	1:250
Donkey α -guinea pig IgG (H+L)-Rhodamine Red-X	Dianova	706-296-148	1:250
Streptavidin-rhodamine Red-X	Dianova	016-290-084	1:500
Goat α -rabbit IgG (H+L)-AMCA	Dianova	111-155-144	1:250, works only with rabbit α -GFAP
Hoechst 33342	Molecular Probes	H3570	1:1000
DAPI	Molecular Probes	D1306	1:1000
<i>Blocking</i>			
Fab-fragment donkey α -mouse IgG (H+L)	Dianova	715-007-003	1:20
Fab-fragment donkey α -rabbit IgG (H+L)	Dianova	711-007-003	1:20
Normal donkey serum	Merck Millipore	S30	
Normal rabbit serum	Dianova	011-000-010	
Normal goat serum	Dianova	005-000-001	
Bovine serum albumin	Sigma-Aldrich	A7906	
<i>Histology</i>			
Cresyl violet	Sigma-Aldrich	C5042	
Neo-Clear	Merck Millipore	109843	non-toxic xylene substitute
Neo-Mount	Merck Millipore	109016	permanent mounting medium
<i>Microscopy</i>			
Axioskop 2	Carl Zeiss Microscopy		
LSM 710	Carl Zeiss Microscopy		