

Materials List for:

Localization of the Locus Coeruleus in the Mouse Brain

Katharina Schmidt¹, Bilal Bari², Martina Ralle³, Clorissa Washington-Hughes¹, Abigael Muchenditsi¹, Evan Maxey⁴, Svetlana Lutsenko¹

¹Department of Physiology, Johns Hopkins University, School of Medicine

²Department of Neuroscience, Johns Hopkins University

³Department of Molecular and Medical Genetics, OHSU

⁴X-ray science division, Advanced Photon Source, Argonne National Laboratory

Correspondence to: Katharina Schmidt at kschmi25@alumni.jh.edu

URL: <https://www.jove.com/video/58652>

DOI: [doi:10.3791/58652](https://doi.org/10.3791/58652)

Materials

Name	Company	Catalog Number	Comments
Adult mouse brain slicer matrix	Zivic Instruments	BSMAS001-1	
Anti-rabbit secondary antibody, Alexa Fluor 488 (source - donkey)	Thermo Fisher Scientific	A-21206	
Charged glass slides	Genesee	29-107	
Confocal microscope	Zeiss	LSM 800	
Cryostat	Microm GmbH	HM 505E	
Cryostat cutting blades	Thermo Fisher Scientific	MX35	
Scissors Mini, 9.5cm	Antech Diagnostics	503241	
DAPI (4',6-diamidino-2-phenylindole)	Sigma-Aldrich	D9542-10MG	
Dopamine β -hydroxylase (DBH) antibody - inhouse production (source - rabbit)	B. Eipper	-	
Dopamine β -hydroxylase (DBH) antibody - commercially available (source - rabbit)	Cell Signaling	8586	
Falcon tubes, 50ml	USA Scientific	339652	
Forane (isoflurane)	Baxter	NDC 1019-360-60	
Forceps Micro Adson	Antech Diagnostics	501245	
Hardset mounting media	EM sciences	17984-24	
Microscope	Pascal	LSM 5	
Multi-well plates, 24 wells	Thermo Fisher Scientific	930186	
Optimal cutting temperature compound (OCT)	VWR/ tissue tech	102094-106	
Paraformaldehyde (PFA)/ formalin 10%	Fisher Scientific	SF98-4	
Peel-A-Way disposable embedding molds	Polysciences Inc.	18646A	
Pencil brush			
Phosphate buffered saline (PBS)	Life Tech	14190250	
Razor blades	Amazon	ASIN: B000CMFJZ2	
Spatulas	Antech Diagnostics	14374	
T pins	Office Depot	344615	
The Mouse Brain in Stereotaxic Coordinates, Paxinos and Franklin, 3rd Edition	Amazon	ISBN: 978-0123694607	

Triton-X 100 (to prepare PBS)	Sigma-Aldrich	T8787	
Tween 20	Sigma-Aldrich	P7949-500ml	
Tyrosine hydroxylase (TH) antibody (source - rabbit)	EMD Millipore	AB152	
Ultralene thin film for XRF	SPEX Sample Prep	3525	
Wide-field fluorescent microscope	Zeiss	Axio Zoom.V16	