

Materials List for:

Stereological Estimation of Dopaminergic Neuron Number in the Mouse Substantia Nigra Using the Optical Fractionator and Standard Microscopy Equipment

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URL: <https://www.jove.com/video/56103>

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Materials

Name	Company	Catalog Number	Comments
Paxinos mouse atlas			The Mouse Brain George Paxinos Keith B.J.FranklinCopyright ©2001 by Academic Press CD Rom designet & created by Paul Halasz
brain matrix slicer mouse	Zivic Instruments	BSMAS 001-1	
paraformaldehyde	Merck	1040051000	
sucrose /D(+) Saccharose	Roth	4621.1	
isopentane	Roth	3927.1	
glycerol	Merck	1040931000	
Ethanol	Sigma Aldrich	32205-1L	
Name	Company	Catalog Number	Comments
phosphate buffered saline ingredients:			
sodium chloride	Sigma Aldrich	31434-1KG-R	
potassium dihydrogen phosphate	Merck	1048731000	
di-sodium hydrogen phosphate dihydrate	Merck	1065801000	
potassium chloride	Merck	1049360500	
normal goat serum	Dako	X0907	
bovine serum albumin	Sigma	A4503-100G	
Triton X-100	Sigma Aldrich	X100-100ml	detergent
3,3-Diaminobenzidine-tetrahydrochlorid/DAB tablets 10mg pH 7.0	Kem En Tec	4170	
H ₂ O ₂ / Hydrogen peroxide 30%	Merck	1072090250	
avidin/biotin reagent	Thermo Scientific	32050	Standard Ultra Sensitive ABC Staining Kit, 1:100
rabbit anti mouse tyrosine hydroxylase antibody	abcam	Ab112	1:1000
biotinylated goat-anti-rabbit IgG H +L	vector laboratories	BA-1000	1:100
StereoInvestigator version 11.07	MBF		
BX53 microscope	Olympus		
VisiView	Visitron Systems GmbH	3.3.0.2	
Axiophot2	Zeiss		
ImageJ software	NIH	Version 4.7	

Tissue-TEK OCT	Sakura	4583	
dry ice			
grid overlay plugin	Wayne Rasband		https://imagej.nih.gov/ij/plugins/graphic-overlay.html
cell counter plugin	Kurt de Vos		https://imagej.nih.gov/ij/plugins/cell-counter.html).
optical disector macro	Christopher Ward		
C57Bl/6N male mice	Charles River, Germany		
SuperFrost Plus coated object slides	Langenbrinck, Germany		
25G needle Microlance 3	BD	300400	
REGLO Analog Infusion pump	Ismatec	ISM 829	
Stereoinvestigator system			Stereoinvestigator version 11.07
BX53 microscope			BX53 microscope
self-assorted stereology			Visiview
Axiophot2			Axiophot2