Cell Centered Database

University of California, San Diego Maryann Martone

Microscopy Product #:58 1wk-both3

For the most updated information, please visit

http://ccdb.ucsd.edu/CCDBWebSite/main?event=displaySum&mpid=58

Image2D	Reconstruction	Segmentation

Project Information:

PROJECT_ID	P1230
PROJECT_NAME	Astrocyte Development
PROJECT_DESCRIPTION	Postnatal development of protoplasmic astrocytes
LEADER	Eric Bushong
FUNDING_AGENCY	NIH
PROJECT_START_DATE	2002-02-01 00:00:00.0
PROJECT_END_DATE	
COLLABORATORS	Maryann Martone, Mark Ellisman
PUBLICATION1	Bushong EA, Martone ME, Ellisman MH. Maturation of astrocyte morphology and the establishment of astrocyte domains during postnatal hippocampal development. Int J Dev Neurosci. 2004 Apr;22(2):73-86.
PUBLICATION2	
PUBLICATION3	

Experiment Information -		
PURPOSE	Examine the morphology of 1 week old astrocytes	
TITLE	Morphology of astrocytes in 1 week old hippocampus	
EXPERIMENTER	Eric Bushong	
EXPERIMENT_NAME		
EXPERIMENT_DATE		

Subject Information -	
GROUP_BY	NA
SUBJECT_NAME	NA
FIXATION_METHOD_ID	2
SCIENTIFIC_NAME	rattus norvegicus
SPECIES	rat
STRAIN	Sprague Dawley
AGE	1 weeks
AGECLASS	juvenile
ANIMAL_NAME	
LITTER_ID	
SEX	male
VENDOR	
WEIGHT	

Tissue -	
ANATOMIC_LOCATION	hippocampus
MICROTOME	vibratome
ORIENTATION	coronal
THICKNESS	100 um
TISSUE_PROD_STORAGE	coverslipped
EXTERNAL_FILE_NAME	NA
TISSUE_GROUP_TYPE	NA

Microscopy Product Information -	
MICROSCOPY_PRODUCT_ID	58
IMAGE_BASENAME	1wk-both3
CREATE_DATE	
INSTRUMENT	Biorad Radiance 2000 Confocal
MICROSCOPE_TYPE	confocal
PLANE_COUNT	
PRODUCT_TYPE	optical section series
PURL	NA
SESSION_NAME	
TELESCIENCE_SRB	P1230/Experiment_25/Subject_26/Tissue_32/Microscopy_58
X_RESOLUTION	.068519 um ? ??t?b hU ^ r ??E#!
	>U ? ? t?b U oUN?ea????UN?UN? ? U
Y_RESOLUTION	.068519 um ? ??t?b hU ^ r ??E#!
	>U ? ? t?b U oUN?ea????UN?UN? ? U
XSIZE	1024
YSIZE	1024

Protocol:

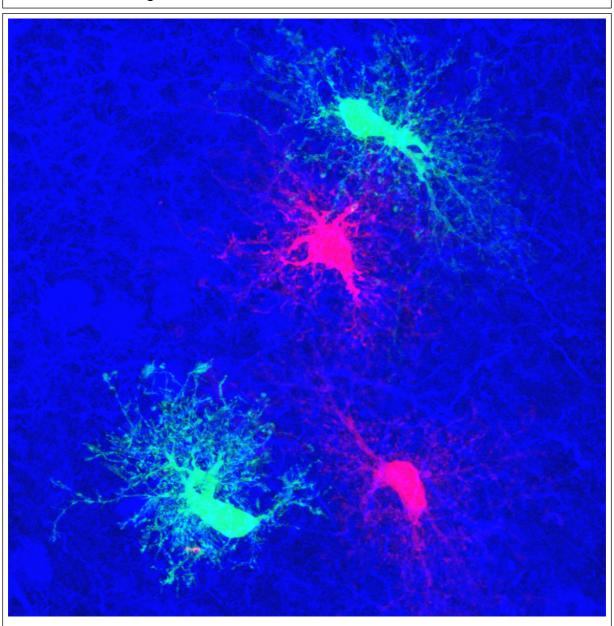
Image Type -	
THROUGH_FOCUS_SERIES_ID	58
ZSTEP	.2um
OPTICAL_SECTION_SERIES	58

Specimen Description -	
ANATOMICAL_DETAIL	58
ATLAS_COORD	, ,
CELL_TYPE	protoplasmic astrocyte
ORGAN	brain
REGION	hippocampus
SYSTEM	central nervous system

Light Microscopy Product -	
LMPRODUCT_ID	58
COVER_SLIP_THICKNESS	1 umaw(? AUawAU WyuwdU (?? A Gaw?Paw??
IMMERSION_MEDIUM	oil
LENS	Nikon
LENS_MAGNIFICATION	60 xU ? O?6 dl hU ^ r ?6 ??N ! >U O?6 dl U oUN?ea????UN?UNO?6 U
MOUNTING_MEDIUM	gelvatol
NUMERICAL_APERTURE	1.4
REFRACTIVE_INDEX	1.5

Reconstruction

Reconstruction Image -



Reconstruction -	
RECONSTRUCTION3D_ID	58
BASENAME_ORIGFILE	NA
CROPPING_COORDINATE1	,
CROPPING_COORDINATE2	,
RECON_TYPE	optical section series
THUMBNAIL	P1230/1wk-both3_vt.jpg
VOLUME_DIMENSION	, ,
VOLUME_NAME	Feb2004E/1wk/both/1wk-both3/1wk-both3-proj.tar
VOXEL_SCALE	, ,
RECONSTRUCTION_IMAGES_I	58
RECON_IMAGE_DESC	Optical section series through adjacent hippocampal astrocytes injected with Lucifer Yellow (green) and Alexa568 (red) respectively, and immunolabeled for GFAP (blue), imaged with confocal microscopy
RECON_FILE_NAME	Feb2004E/1wk/both/1wk-both3/1wk-both3-proj.jpg
VOLUME_THUMBNAIL	P1230/1wk-both3_vt.jpg

USER AGREEMENT

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USER NOTIFICATION

For large size image data, it will take several minutes to download, please be patient. Thanks!

ACKNOWLEDGEMENT

Data used from the CCDB should be appropriately referenced, including both the author of the data and the CCDB. If the data were from a published study, the reference is included in the database record. The following reference should be cited for the CCDB:

Martone, M. E., Gupta, A., Wong, M., Qian, X., Sosinsky, G., Ludaescher, B., and Ellisman, M. H. A cell centered database for electron tomographic data. J. Struct. Biology 138: 145-155, 2002.

In addition, the support for the Cell Centered Database should be included in the acknolwedgement section of any publication: The Cell Centered Database is supported by NIH grants from NCRR RR04050, RR RR08605 and the Human Brain Project DA016602 from the National Institute on Drug Abuse, the National Institute of Biomedical Imaging and Bioengineering and the National Institute of Mental Health, and NSF grants supporting the National Partnership for Advanced Computational Infrastructure NSF-ASC 97-5249 and MCB-9728338.

Maryann Martone