### **Cell Centered Database**

# University of California, San Diego Maryann Martone

### Microscopy Product #:1064 4wk-ly16

For the most updated information, please visit

http://ccdb.ucsd.edu/CCDBWebSite/main?event=displaySum&mpid=1064

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 4 week old astrocytes
TITLE	Morphology of astrocytes in 4 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	4 weeks
AGECLASS	young adult
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	1064
IMAGE_BASENAME	4wk-ly16
CREATE_DATE	
INSTRUMENT	Biorad Radiance2000
MICROSCOPE_TYPE	single photon confocal
PLANE_COUNT	
PRODUCT_TYPE	optical section series
PURL	NA
SESSION_NAME	
TELESCIENCE_SRB	P1230/Experiment_23/Subject_24/Tissue_31/Microscopy_1064
X_RESOLUTION	.077083 pixels/um
Y_RESOLUTION	.077083 pixels/um
XSIZE	1024
YSIZE	1024

### **Protocol:**

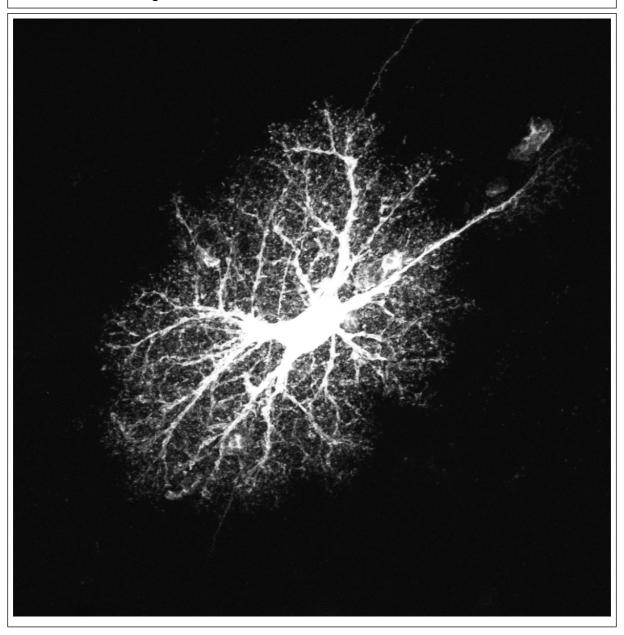
Image Type -	
THROUGH_FOCUS_SERIES_ID	1064
OPTICAL_SECTION_SERIES	1064
OPTICAL Z RESOLUTION	.2 um

Specimen Description -	
ANATOMICAL_DETAIL	1064
ATLAS_COORD	, ,
CELL_TYPE	protoplasmic astrocyte
ORGAN	brain
REGION	hippocampus
SYSTEM	central nervous system

Light Microscopy Product -	
LMPRODUCT_ID	1064
COVER_SLIP_THICKNESS	1 um
IMMERSION_MEDIUM	oil
LENS	Nikon
LENS_MAGNIFICATION	60 x
MOUNTING_MEDIUM	gelvatol
NUMERICAL_APERTURE	1.4
REFRACTIVE_INDEX	1.5

### Reconstruction

Reconstruction Image -



Reconstruction -	
RECONSTRUCTION3D_ID	1064
CROPPING_COORDINATE1	,
CROPPING_COORDINATE2	,
RECON_TYPE	optical section series
THUMBNAIL	P1230/4wk-ly16_vt.jpg
VOLUME_DIMENSION	, ,
VOLUME_NAME	Feb2004E/4wk/ly/4wk-ly16/4wk-ly16.tar
VOXEL_SCALE	, ,
RECONSTRUCTION_IMAGES_I	1064
RECON_IMAGE_DESC	Optical section series through a protoplasmic astrocyte in rat hippocampal area CA1 intracellulaly injected Lucifer Yellow and imaged with confocal microscopy
RECON_FILE_NAME	Feb2004E/4wk/ly/4wk-ly16/4wk-ly16-proj.jpg
VOLUME_THUMBNAIL	P1230/4wk-ly16_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.

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Maryann Martone