Cell Centered Database University of California, San Diego Maryann Martone

| Microscopy Product #:1047 4wk-both2 For the most updated information, please visit http://ccdb.ucsd.edu/CCDBWebSite/main?event=displaySum&mpid=1047 | | |
|---|----------------|--------------|
| 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 | 1047 |
| IMAGE_BASENAME | 4wk-both2 |
| 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_1047 |
| X_RESOLUTION | .123333 pixels/um |
| Y_RESOLUTION | .123333 pixels/um |
| XSIZE | 1024 |
| YSIZE | 1024 |

Protocol:

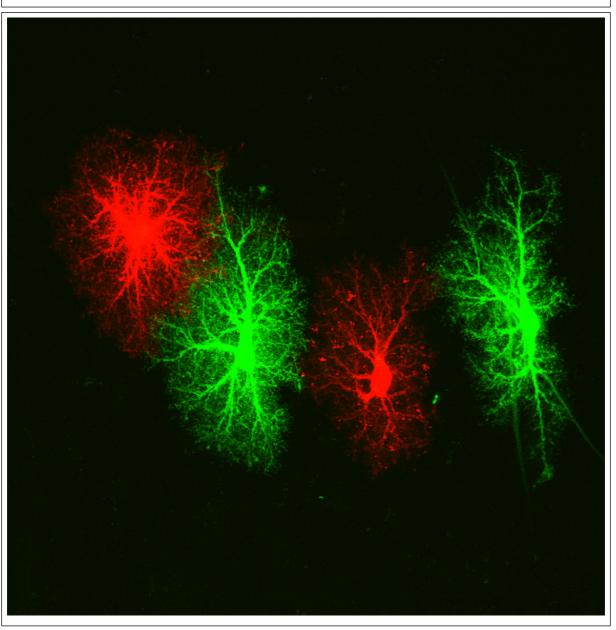
| Image Type - | |
|-------------------------|--------|
| THROUGH_FOCUS_SERIES_ID | 1047 |
| OPTICAL_SECTION_SERIES | 1047 |
| OPTICAL_Z_RESOLUTION | .25 um |

| Specimen Description - | |
|------------------------|------------------------|
| ANATOMICAL_DETAIL | 1047 |
| ATLAS_COORD | , , |
| CELL_TYPE | protoplasmic astrocyte |
| ORGAN | brain |
| REGION | hippocampus |
| SYSTEM | central nervous system |

| Light Microscopy Product - | |
|----------------------------|----------|
| LMPRODUCT_ID | 1047 |
| 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 | 1047 |
| CROPPING_COORDINATE1 | , |
| CROPPING_COORDINATE2 | , |
| RECON_TYPE | optical section series |
| THUMBNAIL | P1230/4wk-both2_vt.jpg |
| VOLUME_DIMENSION | , , |
| VOLUME_NAME | Feb2004E/4wk/both/4wk-both2/4wk-both2.tar |
| VOXEL_SCALE | ۶ ۶ |
| RECONSTRUCTION_IMAGES_I D | 1047 |
| RECON_IMAGE_DESC | Optical section series through adjacent protoplasmic astrocytes in rat hippocampal area CA1 intracellulaly injected Lucifer Yellow (green) and Alexa 568 (red) respectively, imaged with confocal microscopy |
| RECON_FILE_NAME | Feb2004E/4wk/both/4wk-both2/4wk-both2-proj.jpg |
| VOLUME_THUMBNAIL | P1230/4wk-both2_vt.jpg |

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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