**OBM CELL SCIENCE** 

Ottawa, ON, CANADA, K1A 0R6
Tel: 866-833-8881
qbm@qbmcellscience.com
www.qbmcellscience.com
© 2010 QBM Cell Science,Inc

### RAT HIPPOCAMPAL CELLS

Protocol to image deuterated propofol in living rat neurons using multimodal stimulated Raman scattering microscopy

Wenying Zhong, Robert Oda, Yasuyuki Ozeki et al. Star Protocols 2023. https://doi.org/10.1016/j.xpro.

2023.102221 Virus Microscopy a

<u>Defects in Cytoplasmic Assembly and Sorting of US9 Pseudorabies Virus</u> Microscopy and Mutants

Microanalysis, v

Microscopy and Microanalysis, vol. 28, issue S1, pp. 1372-1373

<u>Direct visualization of general anesthetic propofol on neurons by stimulated Raman scattering microscopy</u>

iScience 2022 Feb 17;25(3):103936. doi: 10.1016/j.isci.2022.103936. e Collection 2022 Mar 18

Electrophysiology using coaxial atom probe array: Live imaging reveals hidden circuits of a hippocampal neural network- Supplementary

Electrophysiology using coaxial atom probe array: Live imaging reveals hidden circuits of a hippocampal neural network

J Neurophysiol 2021 Jun 1;125(6):2107-2116. doi: 10.1152/jn.00478.2020. Epub 2021 Apr 21

Cytoskeletal Filaments Deep Inside a Neuron Are Not Silent: They
Regulate the Precise Timing of Nerve Spikes Using a Pair of Vortices

Symmetry 2021, 13(5), 821; https://doi.org/10.3390/s ym13050821

<u>Filaments and four ordered structures inside a neuron fire a thousand times faster than the membrane: theory and experiment</u>

J Integr Neurosci 2021 Dec 30;20(4):777-790. doi: 10.31083/j.jin2004082

<u>Fractal, Scale Free Electromagnetic Resonance of a Single Brain</u>

<u>Extracted Microtubule Nanowire, a Single Tubulin Protein and a Single Neuron</u>

Fractal Fract. 2020, 4(2), 11;

Reducing the Dimension of a Patch-Clamp to the Smallest Physical Limit Using a Coaxial Atom Probe

Progress In Electromagnetics Research B, Vol. 89, 29-44, 2020

2020

doi:10.2528/PIERB20072405

Modeling the temporal network dynamics of neuronal cultures

PLoS Comput Biol. 2020 May; 16(5): e1007834.

Electrical Recordings of Primary Neuronal Cultures

**QBM CELL SCIENCE** 

Ottawa, ON, CANADA, K1A 0R6 Tel: 866-833-8881 qbm@qbmcellscience.com www.qbmcellscience.com © 2010 QBM Cell Science,Inc

2020; 8: 626.

A Ketogenic Diet Improves Mitochondrial Biogenesis and Bioenergetics via the PGC1α-SIRT3-UCP2 Axis	Neurochem Res. 2018 Jul 19. doi: 10.1007/s11064-018-2588-6.
Controlled placement of multiple CNS cell populations to create complex neuronal cultures	PLoS One. 2017 Nov 21;12(11):e0188146.
Assay of Calcium Transients and Synapses in Rat Hippocampal Neurons by Kinetic Image Cytometry and High-Content Analysis: An In Vitro Model System for Postchemotherapy Cognitive Impairment  Antibodies that work again and again	
Inventing a co-axial atomic resolution patch clamp to study a single resonating protein complex and ultra-low power communication deep inside a living neuron cell	J. Integr. Neurosci. 0, 1 (2017). DOI: http://dx.doi.org/10.1142/S02 19635216500321
Inventing atomic resolution scanning dielectric microscopy to see a single protein complex operation live at resonance in a neuron without touching or adulterating the cell	· · · · · · · · · · · · · · · · · · ·

Microfluidic Multielectrode Arrays for Spatially Localized Drug Delivery and Front Bioeng Biotechnol.

The TRPM8 Protein is a Testosterone Receptor: II. Functional Evidence for an Ionotropic Effect of Testosterone on TRPM8

Journal of Biological Chemistry (Impact Factor: 4.6). 12/2014;

Hippocampal Neuron Protecting Effect of Propofol Against Hypoxia/Reoxygenation via Inducing Nerve Growth Factor

Translational Medicine

Study of neuron survival on polypyrrole-embedded single-walled carbon nanotube substrates for long term growth conditions

J Biomed Mater Res A. 2014 Feb 14. doi:

10.1002/jbm.a.35110

<u>Ionizing Radiation Promotes the Acquisition of a Senescence-Associated</u> J Gerontol A Biol Sci Med Sci. Secretory Phenotype and Impairs Angiogenic Capacity in Cerebromicrovascular Endothelial Cells: Role of Increased DNA Damage

and Decreased DNA Repair Capacity in Microvascular Radiosens

**QBM CELL SCIENCE** 

Ottawa, ON, CANADA, K1A 0R6 Tel: 866-833-8881 qbm@qbmcellscience.com www.qbmcellscience.com © 2010 OBM Cell Science,Inc

<u>Fibroblast Growth Factor Receptor 1–5-Hydroxytryptamine 1A</u>
Heteroreceptor Complexes and Their Enhancement of Hippocampal
<u>Plasticity</u>

Biol Psychiatry 2011.09.012 doi:10.1016/j.biopsych.

A hybrid approach for the control of axonal outgrowth: preliminary simulation results

Med Biol Eng Comput (2011) 49:163-170 DOI 10.1007/s11517-010-0687-x

Differential Induction of Rat Neuronal Excitotoxic Cell Death by Human Immunodeficiency Virus Type 1 Clade B and C Tat Proteins

Aids Research And Human Retroviruses Volume 27, Number 00, 2011 DOI: 10.1089/aid.2010.0192

Glatiramer Acetate Attenuates Pro-Inflammatory T Cell Responses but Does Not Directly Protect Neurons from Inflammatory Cell Death

The American Journal of Pathology, Vol. 177, No. 6, December 2010 DOI: 10.2353/ajpath.2010.100442

Changes In Microtubule Turnover Accompany Synaptic Plasticity And Memory Formation In Response To Contextual Fear Conditioning In Mice

Neuroscience 168 (2010) 167-178 doi: 10.1016/ j.neuroscience.2010.03.031

Transfection of Dissociated Hippocampal Neurons in Culture- Cellaxess ® Cellaxess ® Application Note Application Note

Anti-ADDL antibodies differentially block oligomer binding to hippocampal Neurobiol Aging. 2010 neurons

Feb;31(2):189-202.

The brain-specific factor FEZ1 is a determinant of neuronal susceptibility to HIV-1 infection

PNAS August 18, 2009 vol. 106 no. 33 14040-14045 Published online before print August 10, 2009, doi: 10.1073/pnas.09005

S6K1 phosphorylates and regulates fragile X mental retardation protein (FMRP) with the neuronal protein synthesis-dependent mammalian target of rapamycin (mTOR) signaling cascade Supplement

S6K1 phosphorylates and regulates fragile X mental retardation protein J Biol Chem. 2008 Jul (FMRP) with the neuronal protein synthesis-dependent mammalian target 4;283(27):18478-82. doi: of rapamycin (mTOR) signaling cascade

10.1074/jbc.C800055200. Epub 2008 May 12.

Carbon nanotube fibers are compatible with Mammalian cells and neurons Supp

**QBM CELL SCIENCE** 

Ottawa, ON, CANADA, K1A 0R6
Tel: 866-833-8881
qbm@qbmcellscience.com
www.qbmcellscience.com
© 2010 OBM Cell Science.Inc

<u>Carbon nanotube fibers are compatible with Mammalian cells and</u> neurons **IEEE Trans** 

Nanobioscience. 2008

Mar;7(1):11-4.

Rapid Assay Development in Neuronal Function and Colocalization Biologies

Abstract Thermo Scientific-

Cellomics

Alzheimer's disease-type neuronal tau hyperphosphorylation induced by Aβ oligomers

Neurobiol Aging. 2008 Sep;29(9):1334-47. Epub 2007

Apr 2

A High Content Screening Approach for Measuring Neuronal Function

Abstract Thermo Scientific-

Cellomics

Cellular Laserfection

Methods In Cell Biology, Vol.

82 309

<u>Magnetic Resonance Spectroscopy Identifies Neural Progenitor Cells in</u> the Live Human Brain

Science 318, 980

(2007)Published 9 November

2007, DOI:

10.1126/science.1147851

FMRP Phosphorylation Reveals an Immediate-Early Signaling Pathway

Triggered by Group I mGluR and Mediated by PP2A

The Journal of Neuroscience, December 26, 2007 •

27(52):14349 –14357

doi:10.1523/JNEUROSCI.2969-

07.2007

Agonist concentration dependency of blocking kinetics but not equilibrium block of N-methyl-D-aspartate receptors by memantine

Neuropharmacology. 2007 Sep;53(3):415-20. Epub 2007

Jun 7

A drug delivery system based on alginate microspheres: Mass-transport

test and in vitro validation

Biomedical Microdevices Volume 9, Number 3 / June,

2007 Pages 395-403 doi:10.1007/s10544-006-9044-0

On the control of axonal outgrowing for the development of new sieve

interfaces, 2007

IEEE Rehabilitation Robotics, 2007. ICORR 2007page(s): 525-530, Publication Date: 13-15

June 2007

Synaptogenesis Kit, protocol is optimized for rat primary hippocampal

neurons (Lonza Product No. R-HI-501)

Thermo Scientific High Content screening Reagents

**QBM CELL SCIENCE** 

Ottawa, ON, CANADA, K1A 0R6
Tel: 866-833-8881
qbm@qbmcellscience.com
www.qbmcellscience.com
© 2010 QBM Cell Science,Inc

Solution State Characterization of Amyloid â-Derived Diffusible Ligands

Biochemistry. 2006 Dec 26;45(51):15157-67. Epub

2006 Dec 6

<u>Drug-induced activation of SREBP-controlled lipogenic gene expression in CNS-related cell lines: Marked differences between various antipsychotic drugs</u>

BMC Neuroscience 2006; 7: 69 Published online 2006 October 20. doi: 10.1186/1471-2202-7-69.

Region-directed phototransfection reveals the functional significance of a Nature Methods Vol3,No.6 455 dendritically synthesized transcription factor -460 (2006)JunePublished

Nature Methods Vol3,No.6 455 -460 (2006)JunePublished online: 23 May 2006; | doi:10.1038/nmeth885

Somatic mosaicism in neuronal precursor cells mediated by L1 retrotransposition

Nature. 2005 Jun 16;435(7044):903-10.

Supplementary Methods: Cell Culture and Transfection (Supplementary to Somatic mosaicism in neuronal precursor cells mediated by L1 retrotransposition)

Globular amyloid β-peptide 1-42 oligomer - a homogenous and stable neuropathological protein in Alzheimer's disease

J Neurochem. 2005 Nov;95(3):834-47. Epub 2005 Aug 31.

Nuclear calpain regulates Ca2+-dependent signaling via proteolysis of nuclear CaMKIV in cultured neurons

Journal of Biological Chemistry, January 21, 2005 vol 280 Iss Jan21, pp2165-2175, 2005

Chagas' disease parasite promotes neuron survival and differentiation through TrkA nerve growth factor receptor

J Neurochem. 2004 Oct;91(2):385-94.