



StemoniX Publications Peer Reviewed Manuscripts and Book Chapters

Peer Reviewed Manuscripts

Title	Institution(s)	Author(s)	Year	Citation	Key Finding(s)
Human iPSC-Derived 2D and 3D Platforms for Rapidly Assessing Developmental, Functional, and Terminal Toxicities in Neural Cells	StemoniX	Ileana Slavin, Steven Dea, Priyanka Arunkumar, Neha Sodhi, Sandro Montefusco, Jair Siqueira-Neto, Janet Seelke, Mary Anne Lofstrom, Blake Anson, Fabian Zanella, and Cassiano Carromeu	2021	Int J Mol Sci. https://doi.org/10.3390/ijms22041908	microBrain platforms recapitulate neural development and can be used to study neurodevelopmental toxicology.
Altered Network and Rescue of Human Neurons Derived from Individuals with Early-onset Genetic Epilepsy	1) StemoniX 2) University of California San Diego	Priscilla Negraes, Cleber Trujillo, Nam-Kyung Yu, Wei Wu, Hang Yao, Nicholas Liang, Jonathan Lautz, Ellius Kwok, Daniel McClatchy, Jolene Diedrich, Salvador Martinez de Bartolome, Justin Truong, Ryan	2021	Mol Psychiatry. https://doi.org/10.1038/s41380-021-01104-2	microBrain spheroids created from individuals with neural genetic conditions maintain characteristics of the donor and can be used to study treatments and cures.

		Szeto, Timothy Tran, Roberto Herai, Stephen Smith, Gabriel Haddad, John Yates III, and Alysso Muotri			
Screening for Modulators of Neuronal Activity in 3D Human iPSC-derived Cortical Spheroids	1) Janssen Pharmaceutical Company of Johnson and Johnson 2) StemoniX	Grace Woodruff, Naomi Phillips, Cassiano Carromeu, Oivin Guicherit, Alistair White, McCay Johnson, Fabian Zanella, Blake Anson, Timothy Lovenberg, Pascal Bonaventure, Anthony Harrington	2020	PLoS ONE. https://doi.org/10.1371/journal.pone.0240991	microBrain 3D overcomes traditional hurdles in CNS drug discovery by providing access to human neural biology in a high-throughput screening paradigm.
Functional and Mechanistic Neurotoxicity Profiling Using Human iPSC-Derived Neural 3D Cultures	1) National Toxicology Program, National Institute of Environmental Health Sciences 2) Molecular Devices 3) StemoniX	Oksana Sirenko, Frederick Parham, Steven Dea, Neha Sodhi, Steven Biesmans, Sergio Mora-Castilla, Kristen Ryan, Mamta Behl, Grischa Chandy, Carole Crittenden, Sarah	2019	Toxicol Sci. https://doi.org/10.1371/journal.pone.0240991	microBrain 3D can identify functional and mechanistic drug-induced toxicities across multiple experimental endpoints to rank order effects for

		Vargas-Hurlston, Oivin Guicherit, Ryan Gordon, Fabian Zanella, and Cassiano Carromeu			efficient compound triage during drug discovery.
Automated Live-Cell Imaging of Synapses in Rat and Human Neuronal Cultures	1) University of Minnesota 2) Scripps Research Institute 3) Max Planck Florida Institute for Neuroscience 4) University of Iowa	Matthew Green, Thomas Pengo, Jonathan Raybuck, Tahmina Naqvi, Hannah McMullan, Jon Hawkinson, Ezequiel Marron Fernandez de Velasco, Brian Muntean, Kirill Martemyanov, Rachel Satterfield, Samuel Young Jr., and Stanley Thayer	2019	Front Cell Neurosci. https://doi.org/10.3389/fncel.2019.00467	microBrain 2D provides a human-based neuronal system for quantifying changes in synaptic densities and connections across drug discovery, toxicity testing, and basic research.
Predictive and Mechanistic Neurotoxicity Profiling for Hazard Identification with High-Throughput Human iPSC Neurospheres	Takeda Pharmaceuticals	Wang, Q., Cohen., Wagoner M.	20XX	Manuscript in preparation	



Book Chapter

Title	Institution(s)	Author(s)		Citation	
Induced Pluripotent Stem Cell-Derived Human Glutamatergic Neurons as a Platform for Mechanistic Assessment of Inducible Excitotoxicity in Drug Discovery	Johnson and Johnson	Yafei Chen		www.intechopen.com	

StemoniX Marketing Publications

Application Notes - Highlight specific uses of StemoniX products

Viral Infection Assays Using StemoniX microBrain® Assay Ready Plates
High Throughput Screening of LOPAC®1280 Using the microBrain® 3D Assay Ready Platform
StemoniX® microBrain® 3D - A Platform for High Throughput Drug Discovery
Using hiPSC-derived Neural Cultures to Assess the Safety of Prescreened Therapeutic Compounds Against Zika Virus
Neurotoxicity Profiling of a Diverse Chemical Library

Brief Communications - Concise overviews of function, technical, and implementation of StemoniX products

Application Summary: Disease Modeling with iPSCs to Accelerate Drug Discovery
Application Summary: Developing Anti-Viral Therapeutics Using microBrain® 2D and 3D Assay Ready Plates
Technical Summary: Functional Evaluation of microBrain® 3D Assay Ready Plates
Technical Summary: Gene Expression in microBrain® Assay Ready Plates



[Technical Summary: Cellular Identity in microBrain® Assay Ready Cultures](#)

[Publication Summary: Automated Live-Cell Imaging of Synapses in Rat and Human Neuronal Cultures](#)

[Publication Summary Altered network and rescue of human neurons derived from individuals with early-onset genetic epilepsy](#)

[Publication Summary Screening for modulators of neural network activity in 3D human iPSC-derived cortical spheroids](#)

[Instructions for Use - Detailed instructions for using StemoniX products](#)

Instructions for Use: StemoniX® microHeart® Cell Ready 96-Well Plate

Instructions for Use: StemoniX® Human iPSC-Derived NPCs

Instructions for Use: StemoniX® microHeart® Assay Ready 96-Well Plate

Instructions for Use: StemoniX® microHeart® Cell Ready 384-Well Plate

Instructions for Use: StemoniX® microHeart® Assay Ready 384-Well Plate

Instructions for Use: StemoniX® microBrain® Assay Ready 384-Well Plates

Instructions for Use: StemoniX® microBrain® 3D Assay Ready 384-Well Plates

Instructions for Use: StemoniX® microBrain® 3D Assay Ready 96-Well Plates

Instructions for Use: StemoniX® microBrain® 2D Assay Ready 96-Well Plates

Instructions for Use: Differentiation of StemoniX® Human iPSC-Derived Pancreatic Progenitor Cells (PPCs)