iPSC-derived Neurons, how are they being used on **FDSS** recently

Stem Cell Research 17 (2016) 306–317

Contents lists available at ScienceDirect

Stem Cell Research

journal homepage: www.elsevier.com/locate/scr

Induced pluripotent stem cell - derived neurons for the study of spinocerebellar ataxia type 3

Susanne K. Hansen [a,b,*], Tina C. Stummann [b], Helena Borland [b], Lis F. Hasholt [c], Zeynep Tümer [d], Jørgen E. Nielsen [c,e], Mikkel A. Rasmussen [a,1], Troels T. Nielsen [e], Justus C.A. Daechsel [b], Karina Fog [b], Poul Hyttel [a]

[a] Department of Veterinary Clinical and Animal Sciences, University of Copenhagen, Groennegårdsvej 7, 1870 Frb C, Denmark
[b] H. Lundbeck A/S, Ottiliavej 9, Valby 2500, Denmark
[c] Institute of Cellular and Molecular Medicine, University of Copenhagen, Blegdamsvej 3B, 2200 N, Denmark
[d] Applied Human Molecular Genetics, Kennedy Center, Department of Clinical Genetics, Copenhagen University Hospital, Rigshospitalet, GL Landevej 7, Glostrup 2600, Denmark
[e] Neurogenetics Clinic & Research Laboratory, Danish Dementia Research Centre, Rigshospitalet, University of Copenhagen, Blegdamsvej 9, 2100 Copenhagen, Denmark

Original Research

Functional Characterization of Acetylcholine Receptors Expressed in Human Neurons Differentiated from Hippocampal Neural Stem/Progenitor Cells

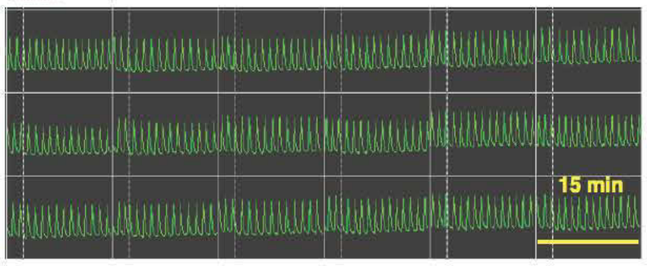
Journal of Biomolecular Screening
1–10
© 2016 Society for Laboratory Automation and Screening
DOI: 10.1177/1087057116
jbx.sagepub.com
SAGE

Kazuyuki Fukushima[1,2], Kazuto Yamazaki[1], Norimasa Miyamoto[2,3], and Kohei Sawada[2,3]

Cellular Dynamics international a FUJIFILM company

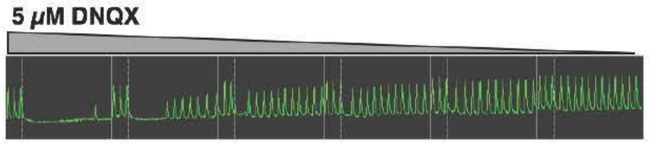
Spontaneous Ca^{2+} Oscillations in Neuronal Cells

iCell® DopaNeurons – Baseline

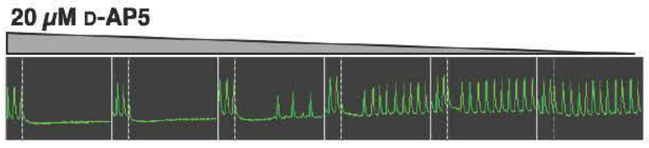


Consistent assay signal from we
iCell® DopaNeurons are cultured in
BrainPhys® neuronal medium (STEM
until DIV 14 and then assayed in Mg^{2+}-
to develop spontaneous Ca^{2+} oscillatio

5 μM DNQX



20 μM D-AP5



Calcium bursts are sensitive to e
receptor blockade. The assay sign
disrupted with antagonists of AMPA a
suggesting that these "bursts" are sy
driven events that are being
Development of this functional endp
complements other assay technolo
MEA) used to assess synchronous n
human iPSC-derived neuronal culture

www.nature.com/scientificreports

SCIENTIFIC REPORTS

OPEN

Received: 12 October 2014
Accepted: 11 May 2015
Published: 20 August 2015

Early pathogenesis of Duchenne muscular dystrophy modelled in patient-derived human induced pluripotent stem cells

Emi Shoji[1,2], Hidetoshi Sakurai[1], Tokiko Nishino[1], Tatsutoshi Nakahata[1], Toshio Heike[3], Tomonari Awaya[3], Nobuharu Fujii[5], Yasuko Manabe[5], Masafumi Matsuo[4] & Atsuko Sehara-Fujisawa[2]

www.nature.com/scientificreports

SCIENTIFIC REPORTS

OPEN

Received: 21 March 2016
Accepted: 20 September 2016
Published: 10 October 2016

Calcium dysregulation contributes to neurodegeneration in FTLD patient iPSC-derived neurons

Keiko Imamura[1], Naruhiko Sahara[2], Nicholas M. Kanaan[3], Kayoko Tsukita[1], Takayuki Kondo[1], Yumiko Kutoku[4], Yutaka Ohsawa[4], Yoshihide Sunada[4], Koichi Kawakami[5], Akitsu Hotta[1], Satoshi Yawata[6], Dai Watanabe[6], Masato Hasegawa[7], John Q. Trojanowski[8], Virginia M.-Y. Lee[8], Tetsuya Suhara[2], Makoto Higuchi[2] & Haruhisa Inoue[1]