

StemCell Services For Your Drug Discovery

- ❑ **Customised** stem cell solutions for Drug Discovery.

- ❑ Over ten years expertise & successful track record in cell biology & cell engineering

- ❑ **All IP generated is owned by the client.**

- ❑ **Expertise In:**
 - ❑ **Human & Animal:** Adult, Cord Blood & Embryonic Stem Cells
 - ❑ Isolation, Characterisation, Differentiation & Expansion
 - ❑ Cell Engineering e.g. Over-expression of Ion Channels, GPCRs
 - ❑ **Assay Development & Custom Cell Line Development**
 - ❑ Stem Cell Technologies e.g. Toxicity Screens, Electrophysiology

- ❑ StemCell Services can provide unlimited sources of stem cells for screening compounds applicable to:
 - ❑ **Drug Discovery & Target Validation** e.g.
 - ❑ Neurodegenerative Diseases
 - ❑ Metabolic Diseases
 - ❑ Inflammatory & Immune Diseases

 - ❑ **Lead Optimisation**
 - ❑ Screen either client compound library or our own

 - ❑ **PK/PD, ADME & Toxicity Screens**
 - ❑ Neurotoxicity
 - ❑ Cardiotoxicity
 - ❑ Hepatotoxicity

STOP PRESS: Advances in Neuronal Drug Discovery

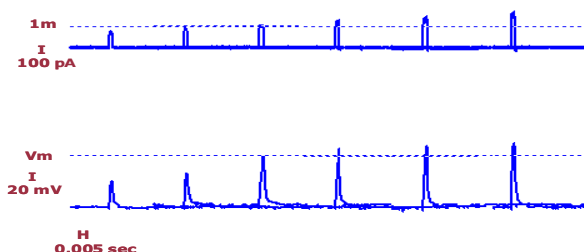
Press Release: 23rd October 2007

StemCell Services, based at the West of Scotland Science Park in Glasgow, have applied their expertise in neuronal cell culture to derive functional neuronal cells from human stem cells.

The embryonic-derived cells are shown to exhibit typical neuronal-like morphology with small cell bodies and extended processes which form networks in the tissue culture dish. These cells are shown to be positive for markers of mature neurons, and interestingly have been shown to exhibit excitable properties typical of neuronal cells.

This is a very important development for the new company. Electrophysiology is the gold standard technology used to understand the electrical functioning of brain cells, such as neurons, and can subsequently be utilised to investigate the effects of novel compounds on neurodegenerative diseases such as Parkinsons or Alzheimers.

The use of stem cells in drug discovery provide an unlimited source of physiologically relevant human cells that can avoid expensive time-consuming mistakes and expand our understanding of pathways and mechanisms associated with debilitating diseases.



Action potentials of the HESC-derived neurons upon stimulation with current pulses. These are shown to be fully functional HESC-derived neurons which are:

- Electropysiologically active
- Exhibit excitability properties
- Possess underlying V-gated sodium and calcium conductances typical of maturing neurons.

To learn more about our stem cell drug discovery services, please contact our Business Development Manager:

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