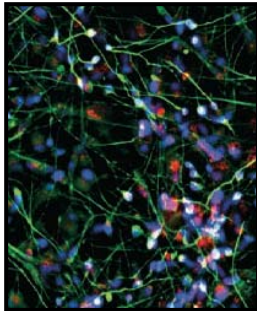
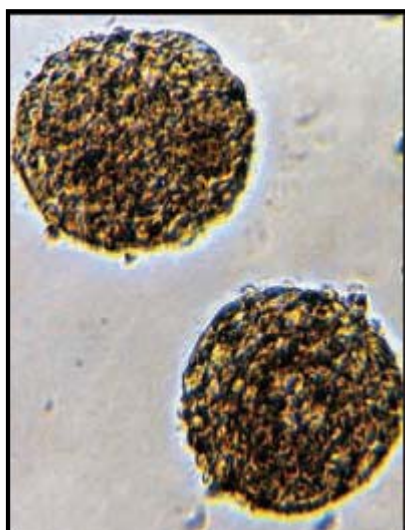


NEUROSCIENCES INNOPROFILE™ HUMAN NEURAL PROGENITOR CELLS (NEUROSPHERES)



Product Type:	Cryo-preserved Neural Progenitors Cells
Catalog Number:	P10161
Source:	Human Brain
Number of Cells:	5 x 10 ⁵ Cells / vial (1ml)
Storage:	Liquid Nitrogen

Human neural progenitor cells – neurospheres (HNPC) are derived from whole fetal brain isolated from a single donor by DV Biologics. HNPC are cryopreserved at primary culture and delivered frozen. These cells readily differentiate into glial or neuronal lineages and are capable of generating vast amounts of specific neural cell types for your experiments.



The central nervous system (CNS) is the most complex biological structure which consists broadly of two classes of cells, neurons and glia. Neurons are functional, trophic units of the CNS that process and transmit signals by electrochemical signaling. Glia perform a number of critical functions including structural support, metabolic support, insulation, and guidance of development. Neural Precursor Cells offer researchers a unique opportunity to study the CNS in vitro and will enable the studies of the mechanisms of development and differentiation that occur in the CNS. In addition, these cells can also be used for studies related to neurodegenerative diseases such as Parkinson's or Alzheimer's disease.

Product Use

THESE PRODUCTS ARE FOR RESEARCH USE ONLY. Not approved for human or veterinary use, for application to humans or animals, or for use in vitro diagnostic or clinical procedures

PRODUCT CHARACTERIZATION

RT-PCR Analysis

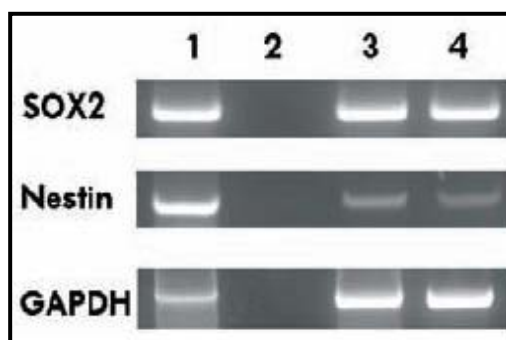
RT-PCR demonstrates that neural progenitor cells highly express early neural development markers Sox 2 and nestin:

Lane 1. Human neural progenitor cells,

Lane 2. no RT control,

Lane 3. NT2 cells,

Lane 4. Human neural cells - whole population



Immunostaining

Immunocytochemistry staining demonstrates human neural progenitor cells:

- Express early neural markers nestin and A2B5 (red and green respectively). **See picture A.**

- Express markers Beta-Tubulin 3 (green), CD133 (red). **See picture B.**

- Can be terminally differentiated in tyrosine hydroxylase (TH) (red) and NeuN (green) positive neuronal cells. Nuclei were stained with DAPI (shown in blue). **See Picture C.**

