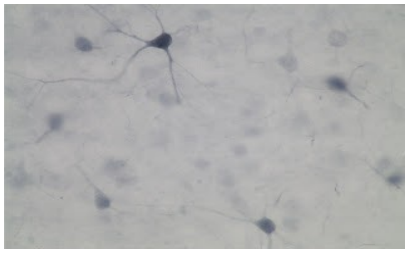
Human Neuronal Branching Kit

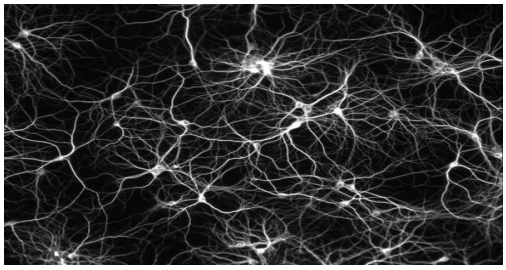
Product Name	Human Neuronal Branching Kit
Catalog Number	EP004
Product Format	6,12, and 24 well
Storage	37°C

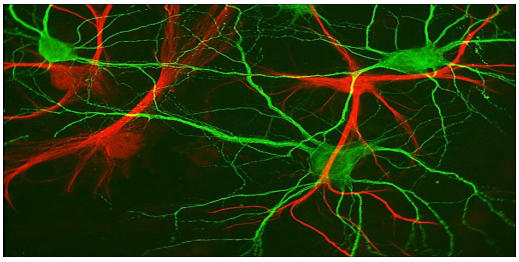


GENERAL INFORMATION Our Human Neuronal Branching Kit possesses a cell body (soma), dendrites, and an axon. We do not use any Retinoic acid to help stimulate neuronal branching in this model. Neuro Cells are cultured in our novel ECM Gel to help stimulate Neuronal Branching. End-user should start to see branch formation 48 hours after seeding the Neuro cells.

This model can be used to study the following disease, but not limited to those applications:

1) Demyelination
2) Axonal degeneration
3) Multiple sclerosis
4) Alzheimer's disease
5) Nerve regeneration
6) HIV encephalitis
7) Parkinson's disease
8) Neuromyelitis Optica
9) Myasthenia gravis
10) Charcot-Marie-Tooth disease





The Human Neuronal Branching Kit contains all of the materials necessary to perform multiple assays in a 24-well format. The kit is designed that the testing materials, i.e.

compounds, conditioned media, or tissue explants, can be added into the system at any time. The resulting effect on Neurites formation (tubular length, number of branches et al) can be monitored throughout the whole process under inverted fluorescence microscope.

Reagents and Materials Provided:

(1) 1 x vial of mixture of Human Brain Neuron ECs and RFP-tagged supporting cells (-80°C or liquid N2)
(2) 1 x 24-well Alpha Coat Solution coated plate (Room temperature, for 2 months)
(3) 1 x 500ml of Endo-Growth Medium (4°C)

Protocols: Day 1

1. Pre warm Endo-Growth Medium to 37ºC in a water bath
2. Accurately pipette 24ml Endo-Growth Medium into a 50ml Falcon tube;
3. Rapidly thaw the vial of cryopreserved cells in a 37ºC water bath;
4. Transfer all cells gently into 24ml pre warmed Endo-growth medium;
5. Mix well the cells gently using a serological pipette;
6. Add 1.0ml of cell suspension to each well of the pre coated 24-well plate.
7. Make sure the cells are evenly dispersed in the wells.
8. Place the plate in an incubator (37ºC, 5% CO2 and humidified).

Day 2

9. Take the plate from the incubator and examine cells under inverted fluorescence microscopy (Human Brain Neurons should sparsely and evenly distributed among RFP positive human mesenchymal supporting cells).
10. Gently remove condition medium. **Be very careful not to damage the Neurites**
11. Add 2.0ml of fresh Endo-Growth medium (control) or Experimental media (Endo-Growth medium, plus pro- or anti-angiogenic regents according to customer's needs).
12. Place the plate back into the incubator. Day 4, 6, 8, 10, 12, and 14…… 13. Replace the medium every 2 days until the end of the experiments.