

ASTROCYTE TRANS-DIFFERENTIATION *IN VITRO* ASSAY

Astrocytosis is a common neurocellular manifestation of brain pathology in individuals with a variety of diseases. Expression of TGF beta 1 is rapidly upregulated after CNS injury and activates transcription factors which increases fibronectin, collagen and actin expression. Disease-modifying therapy that prevents or slows astrocytosis trans-differentiation is still lacking, therefore there is an urgent need to develop new therapies of neuroprotection against TGF beta 1 astrocyte trans-differentiation. A cell-based assay has been developed using primary human astrocytes to evaluate therapeutic compounds in this disease area by measuring biomarker Fibronectin, ASMA and Collagen via high content analysis.

