Recombinant Protein Technical Manual

Recombinant Human GAP43/Neuromodulin Protein (His Tag)

RPES2880

Product Data:

Product SKU: RPES2880

Size: 10µg

Species: Human

Expression host: HEK293 Cells

Uniprot: P17677

Protein Information:

Molecular Mass: 26.2 kDa

AP Molecular Mass: 47 kDa

Tag: C-His

Bio-activity:

Purity: > 96 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: B-50;PP46

Immunogen Information:

Sequence: Met 1-Ala 238

Background:

Neuromodulin, also known as Axonal membrane protein GAP-43, Growth-associated protein 43, Neural phosphoprotein B-50, pp46 and GAP43, is a cell membrane protein which belongs to the neuromodulin family. Neuromodulin / GAP43 contains one IQ domain. Neuromodulin / GAP43 is associated with nerve growth. It is a major component of the motile 'growth cones' that form the tips of elongating axons. Neuromodulin / GAP43 is involved in neurite outgrowth, a crucial process for the differentiation of neurons. The sudden infant death syndrome (SIDS) is the main cause of postneonatal infant death and its cause is still unknown. Neuromodulin / GAP43 is a marker of synaptic plasticity and is critical for normal development of the serotonergic innervation. Neuromodulin / GAP43 is a major cortical cytoskeleton-associated and calmodulin binding protein that is widely and abundantly expressed during development, maintained in selected brain structures in the adult, and reinduced during nerve regeneration. CAP23 and GAP43 are functionally related intrinsic determinants of anatomical plasticity. These proteins function by locally promoting subplasmalemmal actin cytoskeleton accumulation.