Recombinant Human GAP43 Protein (Sumo Tag)



RPES8118

Product Information

Product SKU: RPES8118 Expression Host: E.coli Size: 20μg

Tag: N-Sumo Reactivity: Human Accession: P17677-1

Additional Information

Calculated MW: 39 kDa Observed MW: 55 kDa

Sequence: Met1-Ala238

Protein Information

Background: Neuromodulin, also known as Axonal membrane protein GAP-43, Growth-associated

protein 43, Neural phosphoprotein B-5, pp46 and GAP43, is a cell membrane protein

which belongs to theneuromodulin family. Neuromodulin / GAP43 contains oneIQ

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.

Synonyms: -

Endotoxin: < 10 EU/mg of the protein as determined by the LAL method

Formulation: Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.

Purity: > 90% as determined by reducing SDS-PAGE.

Bio-Activity: Not validated for activity

Storage: Generally, 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°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.