

Recombinant Human GAP43/Neuromodulin Protein (His Tag)

Catalog No. PKSH030848

Note: Centrifuge before opening to ensure complete recovery of vial contents.

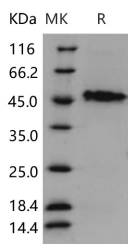
Description

Synonyms	B-50;PP46
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Ala 238
Accession	P17677
Calculated Molecular Weight	26.2 kDa
Observed molecular weight	47 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 96 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 96 % as determined by reducing SDS-PAGE.

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

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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.