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**Recombinant Human GAP43 / Neuromodulin Protein (His tag)****Cat.NO.: TP07762**

3th Edition

**Synonyms:**B-50;PP46

**Description:**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.

**Form:**PBS**Molecular Weight:**26.2 kDa**Sequences:**Met 1-Ala 238**Purity:**> 95% by HPLC**Concentration:****Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.