

**RAPSN, 1-412aa, Mouse, His tag, E.coli**

**Cat.NO.: TP03678**

3th Edition

**Synonyms:**43 kDa receptor-associated protein of the synapse, 43kDa, Nraps, Raps, rapsyn

**Description:**43 kDa receptor-associated protein of the synapse, also known as RAPSN, is expressed in the postsynaptic membrane of skeletal muscle. RAPSN is required for the clustering of nicotinic acetylcholine receptors (nAChR). It self-associates through at least two of its seven tetra-tricopeptide repeats (TPRs). RAPSN interacts with the large intracellular domain of the nAChR a subunit through the hydrophobic surface of the coiled-coil domain. This protein modifies trafficking of AChR within the cell. Overexpression inhibits agrin-induced AChR clustering pathway. Recombinant human RAPSN protein, fused to His-tag at N-terminus, was expressed in E.coli.

**Form:**Liquid. 20mM Tris-HCl buffer (pH8.0) containing 10% glycerol 0.4M Urea

**Molecular Weight:**48.8 kDa (435aa)

**Sequences:**

MGSSHHHHHSSGLVPRGSHMGSMGQDQTKQIEKGLQLYQSNQTEKALQVWMKVLEKGSDDLVRFRVLGCLV  
TAHSEMGRYKEMLKFAVVQIDTARGLEDADFLLESYLNLRARSNEKLCEFHKTISYCKTCLGLPGTRAGAQLGGQVS  
LSMGNAFLGLSLFQKALESFEKALRYAHNDDTMLECRVCCSLGSFYAQVKDYEKALFFPCKAAELVNDYGGKWS  
LKYRAMSQYHMAVAYRLLGHLGSAMECCESMKIALQHGDRLQALCLLCFADIHRSRGDLETAFPRYDSAMSIMT  
EIGNRLGQVHVLLGVAKCWMARKVQDKALDAIEKAQDLAEVGNKLSQLKLHCLSESIYRSKGLQREL RTHVVRFH  
ECVEETELYCGLCGESIGERN SRLQALPCSHIFHLRCLQNNGTRSCPNCRRSSMKPGFV

**Purity:**> 95% by HPLC

**Concentration:**0.5mg/ml (determined by Bradford assay)

**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.