

Recombinant Human MUSK Kinase Protein (aa 433-783, His & GST tag)

Cat.NO.: TP08368

3th Edition

Synonyms:CMS9;FADS

Description:Muscle, skeletal receptor tyrosine-protein kinase, also known as Muscle-specific tyrosine-protein kinase receptor, Muscle-specific kinase receptor, and MUSK, is a single-pass type I membrane protein which belongs to the protein kinase superfamily and tyr protein kinase family. MUSK contains one FZ (frizzled) domain, three Ig-like C2-type (immunoglobulin-like) domains and one protein kinase domain. This protein is a muscle-specific tyrosine kinase receptor and it may play a role in clustering of the acetylcholine receptor in the postsynaptic neuromuscular junction. MUSK expression is increased in muscle cells stimulated with Wnt or at conditions when the Wnt signaling was activated. MUSK is a muscle-specific receptor tyrosine kinase that is activated by agrin. It has a critical role in neuromuscular synapse formation. MUSK is a receptor tyrosine kinase that is a key mediator of agrin's action and is involved in neuromuscular junction (NMJ) organization. Defects in MUSK encoding gene is a cause of autosomal recessive congenital myasthenic syndrome (CMS). Congenital myasthenic syndromes are inherited disorders of neuromuscular transmission that stem from mutations in presynaptic, synaptic, or postsynaptic proteins. MUSK mutations lead to decreased agrin-dependent AChR aggregation, a critical step in the formation of the neuromuscular junction. Mutations in this receptor encoding gene also have been associated with congenital myasthenic syndrome.

Form:PBS

Molecular Weight:68 kDa

Sequences:Arg 433-Val 783

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.