

# Human Musk (muscle, skeletal receptor tyrosine-protein kinase) Protein

Cat. No. MUK-HM101

## Description

<b>Source</b>	Recombinant Human Musk (muscle, skeletal receptor tyrosine-protein kinase) Protein is expressed from HEK293 with His tag at the C-terminus. It contains Leu24-Thr495.
<b>Accession</b>	O15146-1
<b>Molecular Weight</b>	The protein has a predicted MW of 53.46 kDa. Due to glycosylation, the protein migrates to 65-75 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	>95% as determined by Bis-Tris PAGE >95% as determined by HPLC

## Formulation and Storage

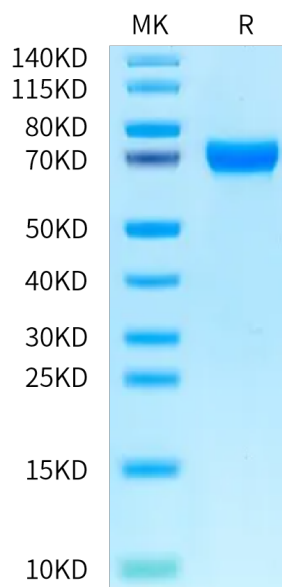
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

MuSK (muscle-specific kinase) is a receptor tyrosine kinase that plays a central signaling role in the formation of neuromuscular junctions (NMJs). MuSK is activated in a complex spatio-temporal manner to cluster acetylcholine receptors on the postsynaptic (muscle) side of the synapse and to induce differentiation of the nerve terminal on the presynaptic side.

## Assay Data

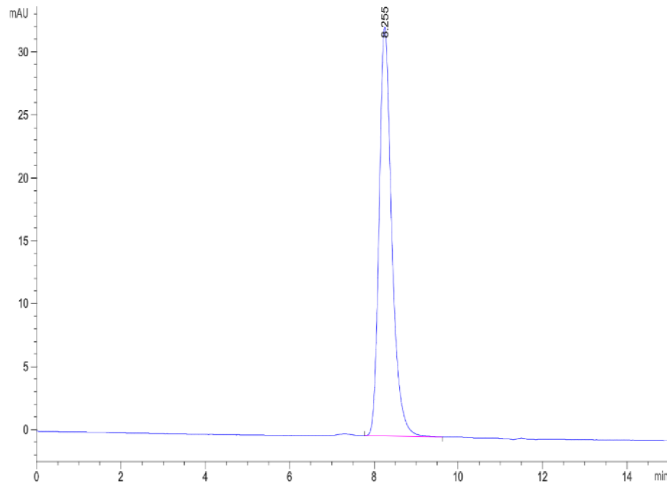
### Bis-Tris PAGE



Human Musk (muscle, skeletal receptor tyrosine-protein kinase) on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data



The purity of Human Musk (muscle, skeletal receptor tyrosine-protein kinase) is greater than 95% as determined by SEC-HPLC.