

## Recombinant Rat Musk Protein, mIgG2a tagged

Cat. No. Musk-44R Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Rat Musk Protein (Glu22-Thr494) with Mouse IgG2a (Glu98-Lys330) Fc tag at C-terminus was expressed in Mouse myeloma cell line.
<b>Species</b>	Rat
<b>Source</b>	Mouse myeloma cell
<b>ProteinLength</b>	22-494aa
<b>Description</b>	Enables protein kinase binding activity and protein tyrosine kinase activity. Involved in several processes, including positive regulation of macromolecule metabolic process; positive regulation of synaptic transmission; and sensory organ development. Located in cell projection; external side of plasma membrane; and neuromuscular junction. Human ortholog(s) of this gene implicated in congenital myasthenic syndrome 9 and fetal akinesia deformation sequence syndrome 1. Orthologous to human MUSK (muscle associated receptor tyrosine kinase).
<b>Tag</b>	mIgG2a
<b>Form</b>	Disulfide-linked homodimer
<b>Bio-activity</b>	Measured by its binding ability in a functional ELISA. In the presence of Recombinant Rat Agrin, immobilized Recombinant Rat MuSK Fc Chimera (2 µg/mL at 100 µL/well) binds Recombinant Human LRP-4 with an ED50 of 0.06-0.3 µg/mL.

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<b>Molecular Mass</b>	79 kDa
<b>Endotoxin</b>	< 0.1 EU/μg by LAL.
<b>Purity</b>	> 90 %, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
<b>N-terminal Sequence Analysis</b>	Glu22
<b>Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
<b>Storage Buffer</b>	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose.
<b>Shipping</b>	The product is shipped at ambient temperature.
<b>Reconstitution</b>	Reconstitute at 500 μg/mL in PBS.
<b>References</b>	1. Valenzuela, D.M. et al. (1995) Neuron 15:573. 2. Finn, A.J. et al. (2003) Nat. Neurosci. 6:717. 3. Nasrin, F. et al. (2014) Sci. Rep. 4:6841.

## GENE INFORMATION

<b>Gene Name</b>	Musk muscle, skeletal, receptor tyrosine kinase [ <i>Rattus norvegicus</i> (Norway rat) ]
<b>Official Symbol</b>	Musk

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**Synonyms**

MUSK; muscle, skeletal, receptor tyrosine kinase; muscle, skeletal receptor tyrosine protein kinase; muscle-specific kinase receptor; muscle-specific tyrosine kinase receptor MuSK; muscle-specific tyrosine protein kinase receptor; muscle specific kinase (neural fold/somite kinase 1); Nsk1

**Gene ID**

81725

**mRNA Refseq**

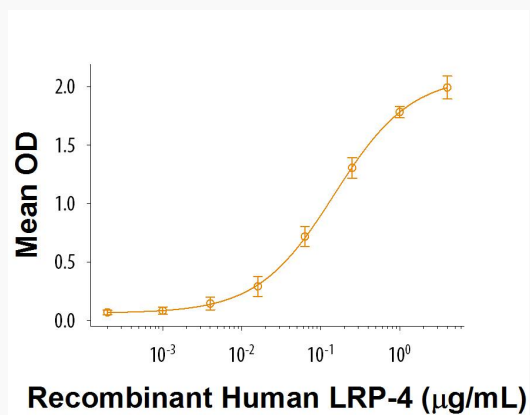
NM\_031061

**Protein Refseq**

NP\_112323

**UniProt ID**

Q62838

**Binding Activity**


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