

## Recombinant Mouse Gemin5 Protein, Myc/DDK-tagged

Cat. No. Gemin5-3188M Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Purified recombinant protein of mouse full-length gem nuclear organelle associated protein 5 (Gemin5), with C-terminal MYC/DDK tag, expressed in HEK293T cells.
<b>Species</b>	Mouse
<b>Source</b>	HEK293
<b>Description</b>	<p>Required for the assembly of the SMN complex that plays a catalyst role in the assembly of small nuclear ribonucleoproteins (snRNPs), the building blocks of the spliceosome. Thereby, plays an important role in the splicing of cellular pre-mRNAs. Most spliceosomal snRNPs contain a common set of Sm proteins SNRPB, SNRPD1, SNRPD2, SNRPD3, SNRPE, SNRPF and SNRPG that assemble in a heptameric protein ring on the Sm site of the small nuclear RNA to form the core snRNP. In the cytosol, the Sm proteins SNRPD1, SNRPD2, SNRPE, SNRPF and SNRPG are trapped in an inactive 6S pICln-Sm complex by the chaperone CLNS1A that controls the assembly of the core snRNP. Dissociation by the SMN complex of CLNS1A from the trapped Sm proteins and their transfer to an SMN-Sm complex triggers the assembly of core snRNPs and their transport to the nucleus. GEMIN5 acts as the snRNA-binding protein of the SMN complex. Binds to the 7-methylguanosine cap of RNA molecules. Binds to the 3'-UTR of SMN1 mRNA and regulates its translation; does not affect mRNA stability. May play a role in the regulation of protein synthesis via its interaction with ribosomes.</p>
<b>Molecular Mass</b>	166.5 kDa

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<b>Purity</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Stability</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>Storage</b>	Store at -80 centigrade after receiving vials.
<b>Concentration</b>	>50 µg/mL as determined by microplate BCA method
<b>Storage Buffer</b>	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol.

## GENE INFORMATION

<b>Gene Name</b>	Gemin5 gem nuclear organelle associated protein 5 [ Mus musculus (house mouse) ]
<b>Official Symbol</b>	Gemin5
<b>Synonyms</b>	GEMIN5; gem (nuclear organelle) associated protein 5; gem-associated protein 5; AA407055; AA407208; AI451603; BB194447; C330013N08
<b>Gene ID</b>	216766
<b>mRNA Refseq</b>	NM_001166669
<b>Protein Refseq</b>	NP_001160141
<b>UniProt ID</b>	Q8BX17

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