

## Active Recombinant Mouse Tnfsf18 protein, His-tagged

Cat. No. Tnfsf18-15M Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Mouse Tnfsf18(Thr47-Ser173) fused with His tag at N-terminal was expressed in HEK293.

**Species** Mouse

**Source** HEK293

**ProteinLength** Thr47-Ser173

#### Description

GITR Ligand, also known as TNFSF18 and TL6, is an approximately 30 kDa type II transmembrane glycoprotein in the TNF superfamily. Mouse GITR Ligand consists of a 23 amino acid (aa) cytoplasmic domain, a 19 aa transmembrane segment, and a 131 aa extracellular domain (ECD). Within the ECD, mouse GITR Ligand shares 56% and 81% aa sequence identity with human and rat GITR Ligand, respectively. GITR Ligand is expressed on antigen presenting cells, CD4-CD8- double negative thymic precursors, vascular endothelial cells, neurons, and in the eye. Its expression is transiently up-regulated by proinflammatory stimulation. The binding of GITR Ligand to GITR on mouse CD25+ Treg cells permits the reactivation of T cells from Treg-induced suppression, although this does not appear to occur in humans. GITR Ligand binding to GITR additionally provides a costimulatory signal to activated CD4+ and CD8+ T cells and NK cells. This interaction also induces reverse signaling in GITR Ligand expressing dendritic cells to suppress cellular activation through the same pathway induced by the immunosuppressant dexamethasone. In the brain, GITR Ligand/GITR

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	interactions enhance NGF-mediated neurite outgrowth from sympathetic neurons.
<b>Predicted N Terminal</b>	His
<b>Form</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein.
<b>Bio-activity</b>	Measured by its ability to stimulate mouse T cell proliferation in the presence of anti-CD3. The ED50 for this effect is typically 0.02-0.3 µg/mL in the presence of 10 µg/mL of a cross-linking antibody, Mouse Anti-polyHistidine Monoclonal Antibody.
<b>Molecular Mass</b>	Predicted Molecular Mass: 16 kDa SDS-PAGE: 16-26 kDa, reducing conditions
<b>Endotoxin</b>	<0.10 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain
<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>Reconstitution</b>	Reconstitute at 100 µg/mL in sterile PBS containing at least 0.1% human or bovine serum albumin.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

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## GENE INFORMATION

**Gene Name** Tnfsf18 tumor necrosis factor (ligand) superfamily, member 18 [ Mus musculus ]

**Official Symbol** Tnfsf18

**Synonyms** TNFSF18; tumor necrosis factor (ligand) superfamily, member 18; tumor necrosis factor ligand superfamily member 18; GITR ligand; glucocorticoid-induced TNF-related ligand; glucocorticoid-induced-tumor necrosis factor receptor ligand; Gitrl;

**Gene ID** 240873

**mRNA Refseq** NM\_183391

**Protein Refseq** NP\_899247

**UniProt ID** Q7TS55

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