

Recombinant Mouse Tnfrsf9 Protein, C-hFc-tagged

Product Information

Cat	IMP-1516
Official Symbol	Tnfrsf9
Product Overview	Recombinant mouse TNFRSF9 (NP_001070976.1) (Met 1-Leu 211) was fused with the Fc region of human IgG1 at the C-terminus.
Description	<p>CD137 (also known as 4-1BB) is a surface co-stimulatory glycoprotein originally described as present on activated T lymphocytes, which belongs to the tumor necrosis factor (TNF) receptor superfamily. It is expressed mainly on activated CD4+ and CD8+ T cells, and binds to a high-affinity ligand (4-1BBL) expressed on several antigen-presenting cells such as macrophages and activated B cells. Upon ligand binding, 4-1BB is associated with the tumor necrosis factor receptor-associated factors (TRAFs), the adaptor protein which mediates downstream signaling events including the activation of NF-kappaB and cytokine production. 4-1BB signaling either by binding to 4-1BBL or by antibody ligation delivers signals for T-cell activation and growth, as well as monocyte proliferation and B-cell survival, and plays an important role in the amplification of T cell-mediated immune responses. In addition, CD137 and CD137L are expressed in different human primary tumor tissues, suggesting that they may influence the progression of tumors. Crosslinking of CD137 on activated T cells has shown promise in enhancing anti-tumor immune responses in murine models, and agonistic anti-CD137 antibodies are currently being tested in phase I clinical trials. Soluble forms of CD137 (sCD137) are generated by differential splicing. sCD137 can bind to CD137 ligand to antagonize the costimulatory activities of the membrane-bound CD137 and reduce T cell proliferation and IL-2 secretion.</p>
Expression System	HEK293
Species	Mouse
Tag	C-hFc
Predicted N Terminal	Val 24
Form	Lyophilized from sterile PBS, pH 7.4, 5 % trehalose, 5% mannitol and 0.01% Tween80.
Molecular Mass	The secreted recombinant mouse TNFRSF9/Fc is a disulfide-linked homodimer. The reduced monomer comprises 429 amino acids and has a calculated molecular mass of 47 kDa. As a result of glycosylation, the apparent molecular mass of the monomer is approximately 65-75 kDa in SDS-PAGE under reducing conditions.
Protein length	Met1-Leu211

Endotoxin

< 1.0 EU/ μ g protein as determined by the LAL method.

Purity

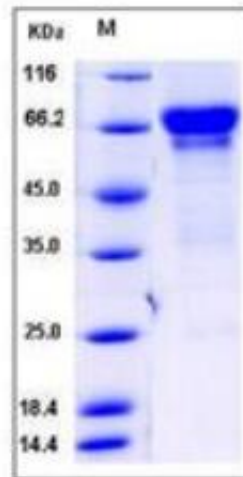
> 90 % as determined by SDS-PAGE

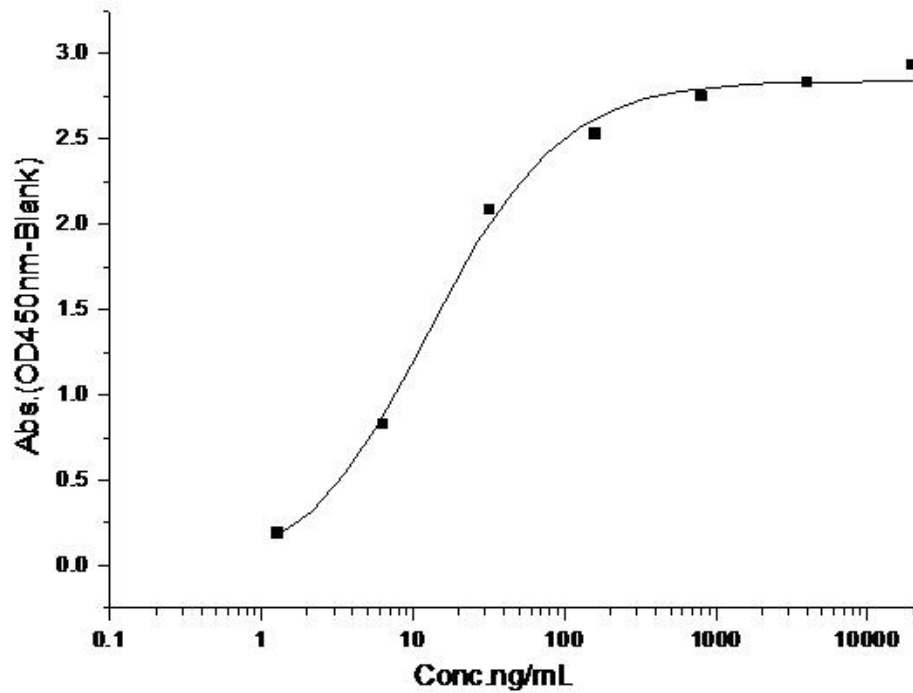
Storage

Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Reconstitution

A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.

SDS-PAGE**Bioactivity-ELISA 1**



Measured by its binding ability in a functional ELISA. Immobilized mouse His-TNFSF9 at 10 $\mu\text{g/mL}$ (100 $\mu\text{L/well}$) can bind mouse TNFRSF9-Fc, The EC50 of mouse TNFRSF9-Fc is 12.0-29.0 ng/mL.