Data Sheet (Cat.No.TMPY-04832)

TargetMol

OX40L/TNFSF4 Protein, Human, Recombinant (hFc)

General Information

Synonyms:	CD252;OX-40L;tumor necrosis factor (ligand) superfamily, member 4;TXGP1;CD134L;OX4OL; GP34
Protein Construction:	A DNA sequence encoding the human TNFSF4 (Gln51-Leu183) was expressed with the Fc region of human IgG1 at the N-terminus. Predicted N terminal: Glu
Species:	Human
Expression Host:	HEK293 Cells
Molecular Weight:	46.6 kDa (predicted)

QC Testing

Biological Activity:	1.Loaded Recombinant Human OX40 Ligand/TNFSF4 Protein, hFc Tag (Cat#TMPY-04832) on ProA Biosensor, can bind Recombinant Human OX40/TNFRSF4 Protein, His Tag (Cat#TMPY-01423) with an affinity constant of 0.909 μM as determined in BLI assay (Sartorius Octet RED384) (Routinely tested). 2.Immobilized Recombinant Human OX40 Protein (His & Avi Tag), Biotinylated (Cat#TMPY-06906) at 1 μg/mL (100 μL/well) on Streptavidin precoated (5 μg/mL, 100 μL/well) plate can bind Recombinant Human OX-40L/TNFSF4/CD252 Protein (Fc Tag) (Cat#TMPY-04832), the EC50 is 2.0-6.0 ng/mL (Routinely tested).
Purity:	> 95 % as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstituted with sterile deionized water to 0.25 mg/mL. Reconstitution conditions may vary depending on the lot.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

OX-40L, also known as TNFSF4 and CD252, is a cytokine that belongs to the tumor necrosis factor (TNF) ligand family. OX-40L is an important costimulatory molecule that plays a crucial role in the regulation of T-cell-mediated immunity. The interaction of TNFSF4-TNFSF4 is involved in the pathogenesis of multiple autoimmune and inflammatory diseases such as systemic lupus erythematosus (SLE), carotid artery disease and cancer. OX-40L is a ligand for receptor TNFRSF4/OX40. It is found to play a role in T cell antigen-presenting cell (APC) interactions. In surface Ig- and CD4-stimulated B cells, this cytokine along with CD7 has been shown to provide CD28-independent costimulatory signals to T cells. This protein and its receptor are reported to directly mediate adhesion of activated T cells to vascular endothelial cells.Cancer ImmunotherapyCo-stimulatory Immune Checkpoint TargetsImmune CheckpointImmune Checkpoint TargetsImmunotherapyTargeted Therapy

Reference

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Lee YH. et al., 2012, Hum Immunol. 73 (10): 1050-4.
Weiguang Y. et al., 2012, PLoS One. 7 (8): e41277.