

## OX40/TNFRSF4 Protein, Human, Recombinant (His)

### General Information

Synonyms:	tumor necrosis factor receptor superfamily, member 4;OX40;CD134;ACT35;TXGP1L;IMD16
Protein Construction:	A DNA sequence encoding the extracellular domain (Met 1-Ala 216) of human TNFRSF4 (NP_003318.1) was expressed, fused with a polyhistidine tag at the C-terminus. Predicted N terminal: Leu 29
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P43489
Molecular Weight:	21.7 kDa (predicted); 40-45 kDa (reducing condition, due to glycosylation)

### QC Testing

Biological Activity:	Measured by its binding ability in a functional ELISA. Immobilized TNFRSF4-His at 2 µg/ml (100 µl/well) can bind human TNFSF4-mFc, the EC50 of human TNFSF4-mFc is 60-240 ng/mL.
Purity:	≥ 90 % as determined by SDS-PAGE. ≥ 95 % as determined by SEC-HPLC.
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. <small>Actual storage temperature shall be subject to the COA.</small>
Shipping:	In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein Background

OX40 (CD134) and its binding partner, OX40L (CD252), are members of the tumor necrosis factor receptor/tumor necrosis factor superfamily, is known to break an existing state of tolerance in malignancies, leading to a reactivation of antitumor immunity. The interaction between OX40 and OX40L plays an important role in antigen-specific T-cell expansion and survival. OX40 and OX40L also regulate cytokine production from T cells, antigen-

presenting cells, natural killer cells, and natural killer T cells, and modulate cytokine receptor signaling. In line with these important modulatory functions, OX40-OX40L interactions have been found to play a central role in the development of multiple inflammatory and autoimmune diseases, making them attractive candidates for intervention in the clinic. Conversely, stimulating OX40 has shown it to be a candidate for therapeutic immunization strategies for cancer and infectious disease. Cancer Immunotherapy Co-stimulatory Immune Checkpoint Targets Immune Checkpoint Immune Checkpoint Detection: Antibodies Immune Checkpoint Detection: ELISA Antibodies Immune Checkpoint Detection: WB Antibodies Immune Checkpoint Proteins Immune Checkpoint Targets Immunotherapy Targeted Therapy

### Reference

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Byun M., (2013) Inherited human OX40 deficiency underlying classic Kaposi sarcoma of childhood. J. Exp. Med. 210:1743-1759.

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