Recombinant Human OX40 Ligand/TNFSF4 His-tag

Catalog Number: 11241-OX

DESCRIPTION

Source	Human embryonic kidney cell, HEK293-derived human OX40 Ligand/TNFSF4 protein Gln51-Leu183, with a N-terminal Met-10-His tag Accession # P23510.1
N-terminal Sequence Analysis	Met
Predicted Molecular Mass	18 kDa

SPECIFICATIONS

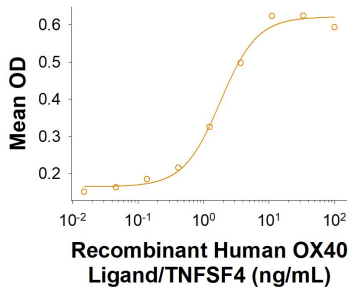
SDS-PAGE	17-34 kDa, under non-reducing conditions.
Activity	Measured by its ability to induce IL-8 secretion in HT1080 human fibrosarcoma cells transfected with human OX40/TNFRSF4. The ED_{50} for this effect is 1.00-15.0 ng/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Supplied as a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Shipping	The product is shipped with dry ice or equivalent. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 6 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after opening. • 3 months, -20 to -70 °C under sterile conditions after opening.

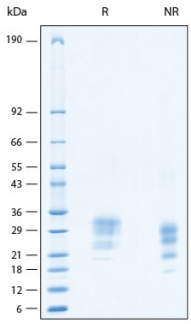
DATA

Bioactivity



Recombinant Human OX40 Ligand/TNFSF4 His-tag Protein Bioactivity. Recombinant Human OX40 Ligand/TNFSF4 His-tag Protein (Catalog # 11241-OX) induces IL-8 secretion in the HT1080 human fibrosarcoma cell line. The ED_{50} for this effect is 1.00-15.0 ng/mL.

SDS-PAGE



Recombinant Human OX40 Ligand/TNFSF4 His-tag Protein SDS-PAGE. 2 µg/lane of Recombinant Human OX40 Ligand/TNFSF4 His-tag Protein (Catalog # 11241-OX) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 17-34 kDa.

BACKGROUND

OX40 Ligand (OX40L), also known as gp34, is a type II transmembrane glycoprotein belonging to the TNF superfamily. Human OX40L cDNA encodes a 183 amino acids (aa) polypeptide with an amino-terminal cytoplasmic domain (aa 1¬23) and a carboxy¬terminal extracellular domain (aa 51-183). It shares 46% aa sequence identity with the mouse counterpart. OX40L is expressed on the surface of activated B cells, T cells, dendritic cells and endothelial cells. Similarly to other TNF superfamily members, membrane-bound OX40 Ligand exists as a homotrimer. OX40L binds to OX40 (CD134), a member of the TNF receptor superfamily that is expressed predominantly on activated CD4+ T cells. OX40 Ligand is one of the co¬stimulatory molecules in the immune system that includes B7, CD40 Ligand, CD30 Ligand, CD27 Ligand and 4¬1BB Ligand. Because OX40 appears as a late activation-induced T cell surface antigen, it has been speculated that the major function of OX40-OX40L interaction is to transmit a late co-stimulatory signal to promote the survival and proliferation of activated CD4+ T cells and prolong the immune response. Engagement of OX40 on activated T cells in situ in tumors has been shown to augment immune responses and subsequent tumor regression.

References:

1. Godfrey, W.R. *et al.* (1994) J. Exp. Med. **180**:757
2. Baum, P.R. *et al.* (1994) EMBO J. **13**:3992.
3. AlShamkhani, A. *et al.* (1997) J. Biol. Chem. **272**:5275.
4. Kjaergaard, J. *et al.* (2000) Cancer Res. **60**:5514.

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