# Human OX40 Ligand / TNFSF4 Protein, His Tag, active trimer (MALS verified)

Catalog # OXL-H5243



# **Synonym**

OX40L,TNFSF4,CD252,Glycoprotein Gp34,TXGP1,CD134 ligand,CD134L

#### **Source**

Human OX40 Ligand Protein, His Tag(OXL-H5243) is expressed from human 293 cells (HEK293). It contains AA Gln 51 - Leu 183 (Accession # <u>P23510-1</u>). Predicted N-terminus: His

#### **Molecular Characterization**

This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 49.4 kDa. The protein migrates as 55-65 kDa and 95-130 kDa when calibrated against <u>Star Ribbon Pre-stained Protein</u> <u>Marker</u> under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per  $\mu g$  by the LAL method / rFC method.

## **Purity**

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

# **Formulation**

Lyophilized from 0.22  $\mu m$  filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### Storage

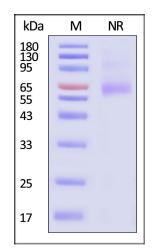
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



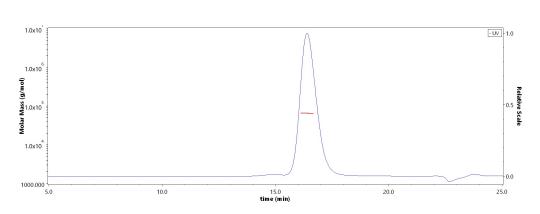
Human OX40 Ligand Protein, His Tag on SDS-PAGE under non-reducing (NR) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

## **Bioactivity-ELISA**

OX40 Ligand ELISA

Immobilized Human OX40 Ligand Protein, His Tag (Cat. No. OXL-H5243) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human OX40, Fc Tag (Cat. No. OX0-H5255) with a linear range of 0.1-1 ng/mL (QC tested).

# SEC-MALS



The purity of Human OX40 Ligand Protein, His Tag (Cat. No. OXL-H5243) is more than 95% and the molecular weight of this protein is around 55-75 kDa verified by SEC-MALS.

<u>Report</u>

## OX40 Ligand ELISA

Immobilized Human OX40 Ligand Protein, His Tag (Cat. No. OXL-H5243) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human OX40 Protein, Mouse IgG2a Fc Tag (Cat. No. OX0-H5252) with a linear range of 0.2-8 ng/mL (Routinely tested).

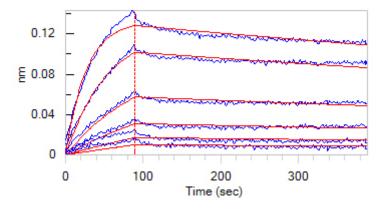


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# **Bioactivity-BLI**



Loaded Biotinylated Human OX40, Avitag, His Tag (Cat. No. TN4-H82E4) on SA Biosensor, can bind Human OX40 Ligand Protein, His Tag (Cat. No. OXL-H5243) with an affinity constant of 91.3 pM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

## Background

Tumor necrosis factor ligand superfamily member 4 (TNFSF4) is also known as glycoprotein Gp34, OX40 ligand (OX40L), TAX transcriptionally-activated glycoprotein 1 and CD252, which belongs to the tumor necrosis factor family. TNFSF4 is the ligand for CD134 and is expressed on such cells as DC2s (a subtype of dendritic cells) enabling amplification of Th2 cell differentiation. 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. Furthermore, similar to other TNF superfamily members, membrane-bound OX40 Ligand (TNFSF4) exists as a homotrimer. Human TNFSF4 shares 46% amino acid sequence identity with its mouse counterpart.

