Synonym

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

Source

Human OX40 Ligand, Fc Tag, premium grade(OXL-H5266) is expressed from human 293 cells (HEK293). It contains AA Gln 51 - Leu 183 (Accession # P23510-1).
Predicted N-terminus: Pro
It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

Molecular Characterization

This protein carries a human IgG1 Fc tag at the N-terminus.

The protein has a calculated MW of 74.0 kDa. The protein migrates as 140-200 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 EU per μg by the LAL method / rFC method.

Sterility

Negative

Mycoplasma

Negative.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH7.5 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

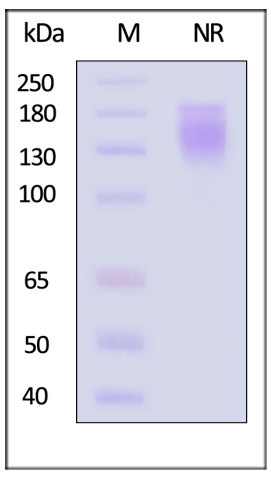
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

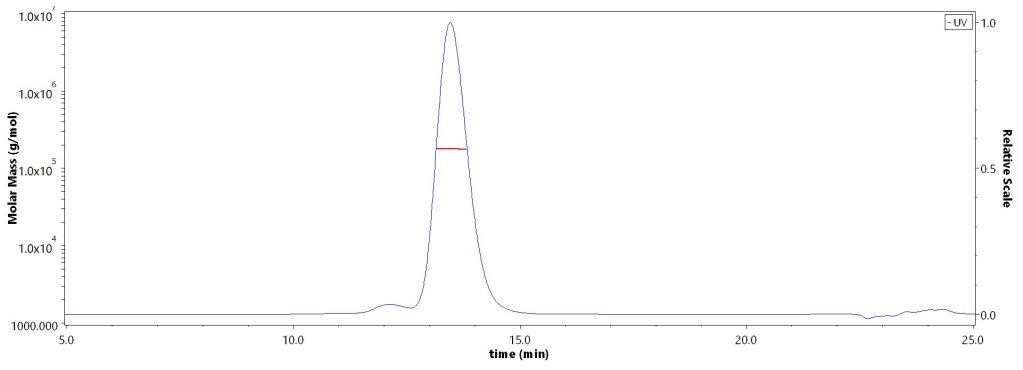
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



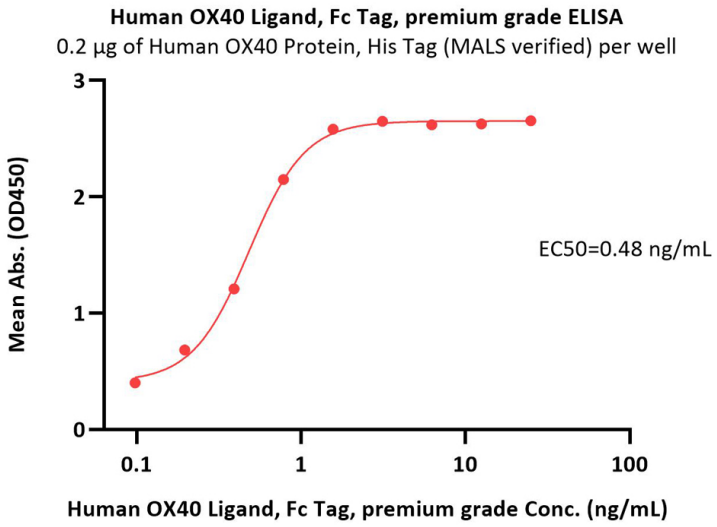
Human OX40 Ligand, Fc Tag, premium grade on SDS-PAGE under non-reducing (NR) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS

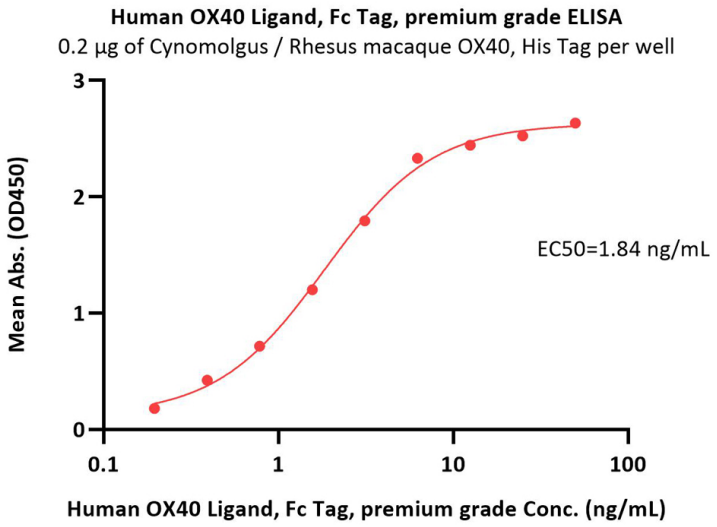


The purity of Human OX40 Ligand, Fc Tag, premium grade (Cat. No. OXL-H5266) is more than 90% and the molecular weight of this protein is around 160-196 kDa verified by SEC-MALS.
Report

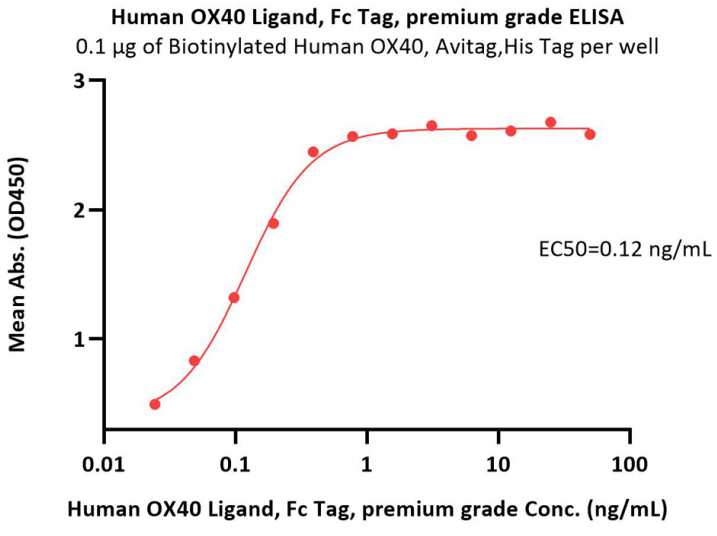
Bioactivity-ELISA



Immobilized Human OX40 Protein, His Tag (Cat. No. OX0-H5224) at 2 μg/mL (100 μL/well) can bind Human OX40 Ligand, Fc Tag, premium grade (Cat. No. OXL-H5266) with a linear range of 0.1-1 ng/mL (QC tested).



Immobilized Cynomolgus / Rhesus macaque OX40, His Tag (Cat. No. OX0-C5220) at 2 μg/mL (100 μL/well) can bind Human OX40 Ligand, Fc Tag, premium grade (Cat. No. OXL-H5266) with a linear range of 0.2-3 ng/mL (Routinely tested).



Immobilized Biotinylated Human OX40, Avitag,His Tag (Cat. No. TN4-H82E4) at 1 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Human OX40 Ligand, Fc Tag, premium grade (Cat. No. OXL-H5266) with a linear range of 0.1-0.4 ng/mL (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.