DATASHEET
Version 20181206

OX40/TNFRSF4, His, Human

Cat. No.: Z03438-1

Size: 1.0 mg

Synonyms: ACT-135; ACT35 antigen; ACT35ATC35 antigen; CD134 antigen; CD134; Ly-70; OX40 cell surface antigen; OX40 homologue; OX40; OX40L receptor; OX40lymphoid activation antigene ACT35

Description:

OX40 is a T cell co-stimulatory molecule of the TNF receptor superfamily that coordinates with other co-stimulators (CD28, CD40, CD30, CD27 and 4-1BB) to manage the activation of the immune response. 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 cells such as DC2s (a subtype of dendritic cells) enabling amplification of Th2 cell differentiation. OX40 is constitutively expressed on Tregs and enhances the sensitivity of Tregs to IL-2, thus promoting Treg proliferation. OX40 has also shown to decrease the cells' immunosuppressive activity on effector T cells. OX40-OX40 Ligand signaling is involved in allergic airway inflammation, graft-versus-host disease and autoimmune disease.
Recombinant Human OX40 produced in HEK293 cells is a polypeptide chain containing 194 amino acids with C-terminal 6×His. A fully biologically active molecule, rhOX40 has a molecular mass of 40-45 kDa, analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 LHCVGDTYPS NDRCCHECRP GNGMVSRCSR SQNTVCRPCG
00041 PGFYNDVVSS KPCKPCTWCN LRSGSERKQL CTATQDTVCR
00081 CRAGTQPLDS YKPGVDCAPC PPGHFSPGDN QACKPWTNCT
00121 LAGKHTLQPA SNSSDAICED RDPPATQPQE TQGPPARPIT
00161 VQPTEAWPRT SQGPSTRPVE VPGGRAVAHH HHHH
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Source: *HEK293*

Species: Human

Biological Activity: Immobilized OX40 His, human at 2 μg/mL (100 μL/well) can bind Biotin-OX40L His, Human with a linear range of 1.22-19.53 ng/mL when detected by Streptavidin-HRP.

Molecular Weight: 40-45 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized from a 0.2 μm filtered solution in PBS, 5% trehalose and mannitol.

Reconstitution: Reconstituted in ddH_2O or PBS at 100 μg/ml.

Purity: > 95% as analyzed by reducing SDS-PAGE.

Endotoxin Level: < 0.2 EU/μg, determined by LAL method.

Storage: Lyophilized recombinant OX40, His, Human remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Human OX40 should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

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