Recombinant Cynomolgus monkey TNFSF4 Protein, Fc tagged

Cat. No. TNFSF4-353C **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Cynomolgus Monkey OX40L (Gln51-Leu183) with N-terminus Fc tag is expressed in 293 cells
Species	Cynomolgus monkey
Source	HEK293
Conjugation/Label	51-183 aa
Description	OX40 ligand (OX40L), also known as CD252 and encoded by the TNFSF4 gene, is a type II transmembrane protein belonging to the tumor necrosis factor (TNF) superfamily. It is primarily expressed on activated antigen-presenting cells, including dendritic cells, B cells, macrophages, and endothelial cells. OX40L serves as the cognate ligand for OX40 (CD134), a costimulatory receptor expressed on activated $CD4^+$ and $CD8^+$ T cells. Engagement of OX40 by OX40L delivers a potent secondary signal that enhances T cell proliferation, survival, cytokine production, and memory T cell formation, thereby amplifying adaptive immune responses. Structurally, OX40L is a ~34 kDa protein with a short N-terminal cytoplasmic domain, a single transmembrane region, and a C-terminal extracellular TNF homology domain. Like other TNF superfamily ligands, OX40L forms stable homotrimers on the cell surface. This trimeric structure is essential for effective receptor clustering and signaling through OX40. Binding of OX40L to OX40 promotes recruitment of TNF receptor–associated factors (TRAFs) to the receptor cytoplasmic tail, activating downstream NF-κB, PI3K–Akt, and MAPK pathways

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	that support T cell expansion and survival. The principal ligand of OX40L is OX40 (CD134), expressed transiently on activated T cells. Through this interaction, OX40L regulates effector and memory T cell responses and can influence regulatory T cell (Treg) function. While critical for protective immunity against infections, excessive or prolonged OX40–OX40L signaling has been implicated in autoimmune and inflammatory diseases, including asthma, atopic dermatitis, systemic lupus erythematosus, and multiple sclerosis. Genetic variants in TNFSF4 have also been associated with susceptibility to autoimmune disorders. Therapeutically, OX40L is a target in both immuno-oncology and immune-mediated disease. In cancer, agonistic strategies that enhance OX40 signaling aim to boost antitumor T cell responses, often in combination with checkpoint inhibitors. Conversely, antagonistic antibodies or biologics that block OX40L–OX40 interactions are being developed to dampen pathogenic T cell activation in autoimmune and allergic conditions. By modulating T cell costimulation, OX40L-directed therapies offer a versatile approach to either amplify or restrain immune responses depending on clinical need.
Form	Liquid, 1×PBS buffer, pH7.4, 0.22 μm filtered
Molecular Mass	This protein has a predicted molecular weight of 41.4 kDa. Under DTT-reducing conditions, the protein migrates at approximately 50 kDa on SDS-PAGE.
Purity	>95% based on SDS-PAGE under reducing condition
Applications	ELISA, BLI
Storage	Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4 centigrade for up to 2 weeks, or at -20 centigrade or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 μm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at ≤ –70 centigrade to minimize freeze-thaw cycles. If additional dilution is required,

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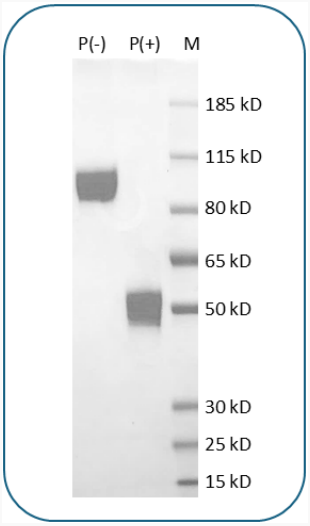
	carrier proteins such as FBS or BSA should be added to maintain protein stability.
Concentration	25 μg size is bottled at 0.2 mg/mL concentration. 100 μg size is supplied at a lot-specific concentration.

GENE INFORMATION

Gene Name	TNFSF4 TNF superfamily member 4 [Macaca fascicularis (crab-eating macaque)]
Official Symbol	TNFSF4
Synonyms	TNFSF4; TNF superfamily member 4; tumor necrosis factor ligand superfamily member 4; tumor necrosis factor (ligand) superfamily, member 4; tumor necrosis factor superfamily member 4
Gene ID	102141877
mRNA Refseq	XM_005540016
Protein Refseq	XP_005540073
UniProt ID	A0A2K5TTN0

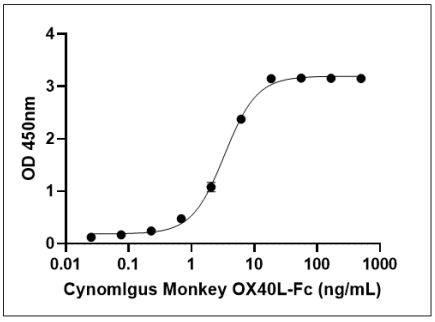
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SDS-PAGE



Purified Cynomolgus Monkey OX4OL Protein (N-Fc) on SDS-PAGE under reducing (P+) and non-reducing (P-) conditions. The purity of the purified protein appears to be greater than 95% based on reducing condition.

ELISA



Biotinylated Human OX40 (C-His-Avi) is coated at 2 μg/mL (200 ng/well). Cynomolgus Monkey OX40L (N-Fc) can bind human OX40 in a dose-dependent manner with the ED50 of 3-10 ng/mL

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