

Recombinant Cynomolgus monkey TNFSF4 Protein, His tagged

Cat. No. TNFSF4-346C **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Cynomolgus Monkey OX40 (Lue29-Ala216) with C-terminus His-tag is expressed in CHO cell.
Species	Cynomolgus monkey
Source	CHO
Conjugation/Label	29-216 aa
Description	OX40, also known as CD134 or TNFRSF4, is a co-stimulatory receptor that plays a key role in regulating T cell activation, survival, and memory formation. OX40 is not expressed on resting naïve T cells but is rapidly upregulated on CD4+ and CD8+ T cells following antigen recognition and co-stimulation. It is also expressed on regulatory T cells and, in some contexts, on innate immune cells. Through its signaling, OX40 enhances the magnitude and durability of adaptive immune responses. Structurally, OX40 is a type I transmembrane glycoprotein and a member of the tumor necrosis factor receptor (TNFR) superfamily. Its extracellular region contains multiple cysteine-rich domains characteristic of TNFR family members, which mediate ligand binding. OX40 has a single transmembrane domain and a cytoplasmic tail that lacks intrinsic enzymatic activity but recruits TNF receptor-associated factors (TRAFs) upon activation. These adaptor proteins initiate downstream signaling pathways, including NF-κB, PI3K-AKT, and MAPK pathways, which promote T cell proliferation, survival, and cytokine production. The primary

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ligand for OX40 is OX40 ligand (OX40L, also known as CD252 or TNFSF4), which is expressed on activated antigen-presenting cells such as dendritic cells, B cells, and macrophages, as well as on endothelial cells in inflamed tissues. Engagement of OX40 by OX40L delivers a potent co-stimulatory signal that supports clonal expansion of effector T cells, enhances the generation of long-lived memory T cells, and can modulate the suppressive function of regulatory T cells. OX40 signaling is implicated in a range of disease processes. In autoimmune and inflammatory diseases, excessive or prolonged OX40–OX40L interactions can drive pathogenic T cell responses, contributing to chronic inflammation and tissue damage. In allergic disease, OX40 promotes Th2 differentiation and cytokine production, supporting allergic inflammation. Conversely, in cancer, insufficient OX40 signaling may limit effective anti-tumor immunity, as robust T cell activation and persistence are required for tumor control. Therapeutically, OX40 is an active target of immunomodulatory strategies. Agonistic antibodies targeting OX40 are being developed to enhance T cell responses in cancer immunotherapy, often in combination with immune checkpoint inhibitors to improve efficacy. In contrast, blockade of the OX40–OX40L pathway is being explored as a potential treatment for autoimmune and inflammatory diseases. These dual approaches underscore OX40's central role in balancing immune activation and regulation in health and disease.

Form	Liquid, 1×PBS buffer, pH7.4, 0.22 µm filtered
Molecular Mass	The protein has a predicted molecular weight of 21.9 kDa. Under DTT-reducing conditions, it migrates at approximately 40 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

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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, 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

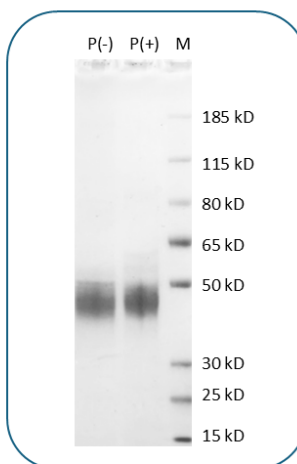
UniProt ID A0A7N9CLL2

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SDS-PAGE



Cynomolgus Monkey OX40 (C-His) on SDS-PAGE under reducing condition (P+) and non-reducing condition (P-). The gel was stained for 1 hour with BlinkBlue. The purity of this protein appears to be greater than 95% based on reducing conditions.

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