

OX40 Ligand/TNFSF4 Protein, Cynomolgus (HEK293, His)

Cat. No.:	HY-P72498
Synonyms:	Tumor necrosis factor ligand superfamily member 4; OX40 ligand; OX40L; CD252; Tnfsf4
Species:	Cynomolgus
Source:	HEK293
Accession:	F7FL80 (Q51-L183)
Gene ID:	706255
Molecular Weight:	23-30 kDa

PROPERTIES

AA Sequence	<p>Q V S H Q Y P R I Q S I K V Q F T E Y K K E E G F I L T S Q K E D E I M K V Q N</p> <p>N S V I I N C D G F Y L I S L K G Y F S Q E V N I S L H Y Q K D E E P L F Q L K</p> <p>K V R S V N S L M V A S L T Y K D K V Y L N V T T D N T S L D D F H V N G G E L</p> <p>I L I H Q N P G E F C V L</p>
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	<p>OX40 Ligand (TNFSF4) is a type II glycoprotein with a cytoplasmic tail of 23 aa and an extracellular domain of 133 aa^[1]. OX40 Ligand is expressed on antigen-presenting cells, such as B cells, dendritic cells (DCs), and macrophages, and airway smooth muscle cells^[3]. OX40 Ligand is a ligand for TNFRSF4 (CD134), belongs to tumor necrosis factor (TNF) family.</p> <p>OX40 Ligand can activate OX40 and thereby functioning as a T cell co-stimulatory molecule. The OX40-OX40 Ligand interaction promotes effector T-cell survival and effectively induces memory T-cell generation, as well as enhances the helper function of Tfh for B cells, and also promotes the differentiation and maturation of DCs^{[1][2]}.</p> <p>Human OX40 Ligand shares <70% aa sequence identity with mouse, rat and rabbit.</p> <p>The interaction between OX40 Ligand with OX40 is essential for the generation of antigen-specific memory T cells, and</p>
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induces host antitumor immunity^[4]. But the over-upregulation of OX40 and OX40L may induce abnormal activation of Tfh cells and excessive production of autoantibodies, which leads to autoimmune disease^[1].

REFERENCES

- [1]. Kaur D, et al. OX40/OX40 ligand interactions in T-cell regulation and asthma. *Chest*. 2012 Feb;141(2):494-499.
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- [4]. Buglio D, et al. HDAC11 plays an essential role in regulating OX40 ligand expression in Hodgkin lymphoma. *Blood*. 2011 Mar 10;117(10):2910-7
- [5]. Ito T, et al, Duramad O, Hanabuchi S, Perng OA, Gilliet M, Qin FX, Liu YJ. OX40 ligand shuts down IL-10-producing regulatory T cells. *Proc Natl Acad Sci U S A*. 2006 Aug 29;103(35):13138-43.
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