

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

Cat. No.:	HY-P72497
Synonyms:	Tumor necrosis factor ligand superfamily member 4; OX40 ligand; OX40L; CD252; Tnfsf4
Species:	Mouse
Source:	HEK293
Accession:	P43488 (S51-L198)
Gene ID:	22164
Molecular Weight:	20-23 kDa

PROPERTIES

AA Sequence	<p> S S S P A K D P P I Q R L R G A V T R C E D G Q L F I S S Y K N E Y Q T M E V Q N N S V V I K C D G L Y I I Y L K G S F F Q E V K I D L H F R E D H N P I S I P M L N D G R R I V F T V V A S L A F K D K V Y L T V N A P D T L C E H L Q I N D G E L I V V Q L T P G Y C A P E G S Y H S T V N Q V P 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. 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]}. Mouse OX40 Ligand shares 81.31% aa sequence identity with rat, and shares <70% aa sequence identity with human. 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]. OX40 Ligand is critical for Th1 and Th2 responses in mice allergic inflammation^[5].

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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- [5]. Arestides RS, et al. Costimulatory molecule OX40L is critical for both Th1 and Th2 responses in allergic inflammation. *Eur J Immunol*. 2002 Oct;32(10):2874-80.
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