OX40/TNFRSF4 Protein, Mouse (HEK293, His)

Cat. No.:	HY-P72499
Synonyms:	Tumor necrosis factor receptor superfamily member 4; Tnfrsf4; OX40; CD134; Txgp1
Species:	Mouse
Source:	HEK293
Accession:	P47741 (V20-P211)
Gene ID:	22163
Molecular Weight:	Approximately 38.42 kDa

PROPERTIES

AA Sequence	V T A R R L N C V K H T Y P S G H K C C R E C Q P G H G M V S R C D H T R D T L C H P C E T G F Y N E A V N Y D T C K Q C T Q C N H R S G S E L K Q N C T P T Q D T V C R C R P G T Q P R Q D S G Y K L G V D C V P C P P G H F S P G N N Q A C K P W T N C T L S G K Q T R H P A S D S L D A V C E D R S L L A T L L W E T Q R P T F R P T T V Q S T T V W P R T S E L P S P P T L V T P E G 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.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. 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	OX40 (TNFRSF4), a member of TNFR superfamily, is a receptor for OX40 Ligand. OX40 is preferentially expressed by T cells, but also found in natural killer T cells, natural killer cells, neutrophils, and human airway smooth muscle cells. Mouse OX40 shares 90% aa sequence identity with rat. Mouse OX40 shares <30% aa sequence identity with human[1]. 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]. The interaction between OX40 Ligand with OX40 is essential for the generation of antigen-specific memory T cells, and

induces host antitumor immunity[3]. 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]. For example, OX40 interacts with OX40 Ligand is critical for Th1 and Th2 responses in mice allergic inflammation[4].

REFERENCES

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[3]. 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.

[4]. 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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