

OX40/TNFRSF4 Protein, Mouse (HEK293, His-Avi)

Cat. No.:	HY-P78334
Synonyms:	CD134; OX40; OX40L receptor; TNFRSF4; ACT-135; Ly-70; OX40 homologue; TXGP1L; IMD16
Species:	Mouse
Source:	HEK293
Accession:	P47741 (V20-P211)
Gene ID:	22163
Molecular Weight:	50-60 kDa

PROPERTIES

Biological Activity	Immobilized Mouse OX-40 Ligand, hFc Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Mouse OX-40, His Tag with the EC ₅₀ of 1.06µg/ml determined by ELISA.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4. Normally 5% trehalose is added as protectant before lyophilization.
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.
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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Caution: Product has not been fully validated for medical applications. For research use only.

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