

PRODUCT INFORMATION



TNFSF4 Extracellular Domain (human, recombinant)

Item No. 32065

Overview and Properties

Synonyms: CD134L, CD252, Glycoprotein Gp34, OX40 Ligand, OX40L, TAX Transcriptionally Activated Glycoprotein 1, Tumor Necrosis Factor Ligand Superfamily Member 4, TXGP1

Source: Active recombinant N-terminal mouse IgG1 Fc-tagged human TNFSF4 expressed in HEK293 cells

Amino Acids: 51-183

Uniprot No.: P23510

Molecular Weight: 42.1 kDa

Storage: -80°C (as supplied)

Stability: ≥1 year

Purity: ≥90% estimated by SDS-PAGE

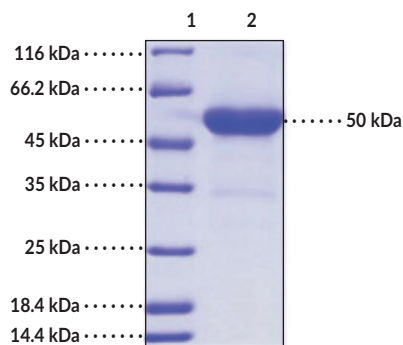
Supplied in: Lyophilized from sterile PBS, pH 7.4

Endotoxin Testing: <1.0 EU/μg, determined by the LAL endotoxin assay

Bioactivity: Measured by its binding ability in a functional ELISA. See figures for details

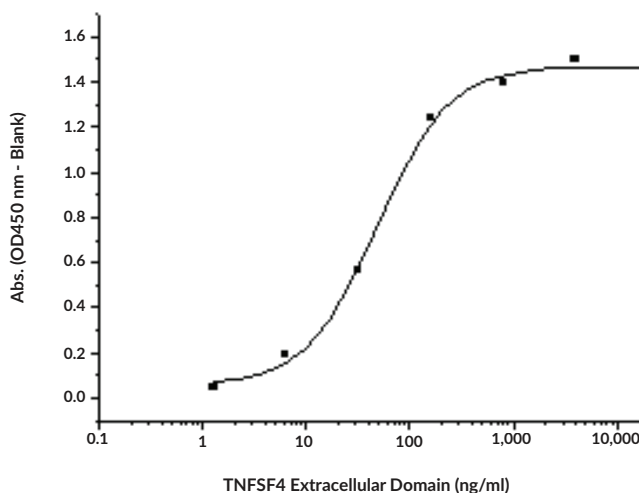
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Images



Lane 1: MW Markers
Lane 2: TNFSF4 Extracellular Domain

SDS-PAGE Analysis of TNFSF4 Extracellular Domain. This protein has a calculated molecular weight of 42.1 kDa. It has an apparent molecular weight of approximately 50 kDa by SDS-PAGE under reducing conditions due to glycosylation.



TNFSF4 Extracellular Domain Measured by its binding ability in a functional ELISA. Immobilized recombinant human TNFRSF4 at 10 μg/ml (100 μl/well) can bind human TNFSF4 extracellular domain with a linear range of 1.28 - 20 μg/ml.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 06/10/2020

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

TNF ligand superfamily member 4 (TNFSF4), also known as OX40L, is a type II transmembrane protein and the cognate ligand of the T cell co-stimulatory TNF receptor TNFRSF4, also known as OX40.^{1,2} TNFSF4 assembles into trimers, with each monomer possessing an approximately 132-amino acid extracellular domain comprised of a TNF homology domain followed by a C-terminal extension. It is upregulated in antigen-presenting cells, including B cells, macrophages, and dendritic cells, in response to antigen presentation, and is also expressed in mast cells, activated T cells, and certain endothelial cells.² Binding of a TNFSF4 trimer to three TNFRSF4 monomers promotes T cell survival and memory, as well as an effector T cell phenotype, enhances cell mobility, and increases the production of effector cytokines. Polymorphisms in *TNFSF4* are associated with susceptibility to systemic lupus erythematosus (SLE) and systemic sclerosis.^{3,4} Cayman's TNFSF4 Extracellular Domain (human, recombinant) protein can be used for ELISA. This protein is a disulfide-lined homodimer. The reduced monomer, comprised of TNFSF4 (amino acids 51-183) fused to mouse IgG1 Fc at its N-terminus, consists of 369 amino acids and has a calculated molecular weight of 42.1 kDa. As a result of glycosylation, the monomer migrates at approximately 50 kDa by SDS-PAGE under reducing conditions.

References

1. Compaan, D.M. and Hymowitz, S.G. The crystal structure of the costimulatory OX40-OX40L complex. *Structure* **14**(8), 1321-1330 (2006).
2. Webb, G.J., Hirschfield, G.M., and Lane, P.J.L. OX40, OX40L and autoimmunity: A comprehensive review. *Clin. Rev. Allergy Immunol.* **50**(3), 312-332 (2016).
3. Lee, Y.H. and Song, G.G. Associations between TNFSF4 and TRAF1-C5 gene polymorphisms and systemic lupus erythematosus: A meta-analysis. *Hum. Immunol.* **73**(10), 1050-1054 (2012).
4. Gourh, P., Arnett, F.C., Tan, F.K., *et al.* Association of TNFSF4 (OX40L) polymorphisms with susceptibility to systemic sclerosis. *Ann. Rheum. Dis.* **69**(3), 550-555 (2010).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM