

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse OX40/TNFRSF4 in direct ELISAs and Western blots. In these formats, less than 2% cross-reactivity with recombinant mouse (rm) EDAR, rm4-BB, rmCD27, rmDR3, rmGITR, rmNGF R, rmCD30, rmCD40, rmFas, rmOPG, rmRANK, rmTNF RI, and rmT
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse OX40/TNFRSF4 Val20-Pro211 Accession # P47741
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Agonist Activity	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

OX40, also known as CD134, was originally identified as an activated rat CD4⁺ T cell-surface antigen that is recognized by the monoclonal antibody MRC OX40. It is a member of the tumor necrosis factor receptor superfamily (TNFRSF) and has been designated TNFRSF4. Mouse OX40 cDNA encodes a 256 amino acid (aa) residues type I transmembrane precursor protein with a putative 19 aa signal peptide, a 192 aa extracellular domain containing 4 TNFR-cysteine rich repeats, a 25 aa transmembrane domain and a 36 aa cytoplasmic region. A naturally occurring soluble OX40 has also been identified in human serum. Mouse OX40 shares approximately 63% and 90% aa sequence identity with its human and rat counterparts, respectively. OX40 is a T cell activation antigen that is expressed primarily on activated CD4⁺ T cells, but is also expressed on activated human and mouse CD8⁺ T cells. The ligand of OX40 is OX40 ligand (OX40L), also known as gp34, a type II transmembrane glycoprotein belonging to the TNF superfamily. OX40L is expressed on activated B cells, T cells, dendritic cells and endothelial cells. Ligation of OX40 on T cells by OX40L or an agonistic antibody can promote clonal expansion, long-term T cell survival, and enhance memory T cell development. *In vivo*, blockade of OX40/OX40L interaction has been useful for treating autoimmune disease and graft-versus-host disease in animal models. Activation of OX40 has also been utilized to enhance the potency of vaccines and augment anti-tumor immunity (1-9).

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.