

Active Recombinant Mouse CD40 Antigen

Cat. No. Cd40-4981M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Cd40 was expressed in E.coli and purified by using conventional chromatography techniques.
Species	Mouse
Source	Mouse
Description	CD40, a member of the TNF receptor family, is a cell surface protein expressed on B cells, dendritic cells, monocytes, thymic epithelial cells and, at low levels, on T cells. Signaling through CD40 plays an important role in the proliferation and differentiation of B cells, and is critical for immunoglobulin (Ig) class switching. The membrane-anchored CD40-Ligand is expressed almost exclusively on activated CD4+ T lymphocytes. Failure to express CD40L leads to "immunodeficiency with hyper-IgM", a disease characterized by failure to produce IgG, IgA and IgE. The soluble form of CD40L is an 18 kDa protein comprising the entire TNF homologous region of CD40L and is generated in vivo by an intracellular proteolytic processing of the full length CD40L.
Form	Sterile filtered through a 0.2 um filter. Lyophilized from 10 mM Na ₃ PO ₄ , pH 7.5 with 0.1M arginine. Restore in water to a concentration of 0.1-1.0 mg/ml.
Purity	>98% pure by SDS PAGE and HPLC
Sequence	Region of murine CD40 protein corresponding to amino acids MQRGDEDPQI AAHVSEANS NAASVLQWAK KGYITMKS NLVMLENGKQLT VKREGLYYVY

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

TQVTFCSNRE PSSQRPFIVG LWLKPSSGSE RILLKAANTH SSSQLCEQQS
VHLGGVFELQ AGASVFNVT EASQVIHRVG FSSFGLLKL.

Molecular Mass	16.4 kDa
Applications	Numerous applications are possible with this product and should be tested by the end user under their own laboratory conditions
Endotoxin Levels	Endotoxin level is less than 0.1 ng per ug (1 EU/ug).
Bioactivity	Determined by its ability to induce TNF-alpha and MIP-1 alpha production by Mouse splenocytes. The expected ED50 for this effect is <0.1 ug/ml.
Storage	Store at 4 deg C until reconstitution. Following reconstitution aliquot and freeze at -20 deg C for long term storage. Avoid repeated freeze/thaw cycles.

GENE INFORMATION

Gene Name	Cd40 CD40 antigen [<i>Mus musculus</i>]
Official Symbol	Cd40
Synonyms	Cd40; CD40 antigen; IGM; p50; Bp50; GP39; IMD3; TRAP; HIGM1; T-BAM; Tnfrsf5; AI326936; OTTMUSP00000017667; OTTMUSP00000017739; T-cell differentiation antigen; tumor necrosis factor receptor superfamily, member 5
Gene ID	21939
mRNA Refseq	NM_011611
Protein Refseq	NP_035741

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

UniProt ID	P27512
Chromosome Location	2 H3; 2 97.0 cM
Pathway	Adaptive Immunity Signaling; Allograft rejection; Asthma; Autoimmune thyroid disease; Cell adhesion molecules (CAMs); Cytokine-cytokine receptor interaction; HTLV-I infection; IL-6 signaling Pathway; Immune System; Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell; Inflammatory Response Pathway; Intestinal immune network for IgA production; Malaria; NLR proteins; Primary immunodeficiency; Systemic lupus erythematosus; Toll-like receptor signaling pathway; Toxoplasmosis; Viral myocarditis
Function	Binding; enzyme binding; protein binding; receptor activity
Rendering based on PDB 1CDF.	