

CD40 Protein, Rat, Recombinant (His)

General Information

Synonyms:	CD40 molecule, TNF receptor superfamily member 5
Protein Construction:	A DNA sequence encoding the rat CD40 (NP_599187.1)(Met1-Arg193) was expressed, fused with a polyhistidine tag at the C-terminus. Predicted N terminal: Leu 20
Species:	Rat
Expression Host:	HEK293 Cells
Accession:	A6JXD6
Molecular Weight:	20.6 kDa (predicted); 28 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Immobilized Recombinant Rat CD40/TNFRSF5 Protein (His Tag) (Cat#TMPY-03203) at 2 µg/mL (100 µL/well) can bind Recombinant Mouse CD40L/CD154/TNFSF5 Protein (Fc Tag) (Cat#TMPY-02793), the EC50 is 857.9 ng/mL.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/µg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 µm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:	Reconstituted with sterile deionized water to 0.25 mg/mL. Reconstitution conditions may vary depending on the lot.
Stability & Storage:	It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots. <small>Actual storage temperature shall be subject to the COA.</small>

Shipping:	In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.
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Protein Background

CD40, also known as TNFRSF5, is a member of the TNF receptor superfamily which are single transmembrane-spanning glycoproteins. CD40 protein plays an essential role in mediating a broad variety of immune and inflammatory responses including T cell-dependent immunoglobulin class switching, memory B cell development, and germinal center formation. CD40 protein is expressed in B cells, dendritic cells, macrophages, endothelial

cells, and several tumor cell lines. Defects in CD40 result in hyper-IgM immunodeficiency type 3 (HIGM3). In addition, CD40/CD40L interaction is found to be necessary for amyloid-beta-induced microglial activation, and thus is thought to be an early event in Alzheimer disease pathogenesis. Cancer Immunotherapy Co-stimulatory Immune Checkpoint Targets Immune Checkpoint Immune Checkpoint Detection: Antibodies Immune Checkpoint Detection: ELISA Antibodies Immune Checkpoint Detection: FCM Antibodies Immune Checkpoint Detection: ICC Antibodies Immune Checkpoint Detection: IP Antibodies Immune Checkpoint Detection: WB Antibodies Immune Checkpoint Proteins Immune Checkpoint Targets Immunotherapy Targeted Therapy

Reference

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