

CD40 Protein, Human, Recombinant (hFc)

General Information

Synonyms:	CDW40;TNFRSF5;CD40 molecule, TNF receptor superfamily member 5;p50;Bp50
Protein Construction:	Glu21-Arg193
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P25942-1
Molecular Weight:	45.9 kDa (predicted); 55-65 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Immobilized Human/Cynomolgus/Rhesus macaque CD40 Ligand Trimer, His Tag at 5 µg/ml (100 µl/Well) on the plate. Dose response curve for Human CD40, hFc Tag with the EC50 of 101.8 ng/ml determined by ELISA. (QC Test) Loaded Human CD40, hFc Tag on ProA-Biosensor can bind Human/Cynomolgus/Rhesus macaque CD40 Ligand (Trimer), His-Flag Tag with an affinity constant of 0.23 µM as determined in BLI assay (Gator® Prime).
Purity:	> 95 % as determined by SDS-PAGE. > 95 % as determined by SEC-HPLC.
Endotoxin:	< 1.0 EU/µg of the protein as determined by the LAL method.
Formulation:	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

Preparation and Storage

Reconstitution:	Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 µg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.
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.

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 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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