CD40 Protein, Human (193a.a, HEK293, C-His)

Cat. No.:	HY-P73499A
Synonyms:	Tumor Necrosis Factor Receptor Superfamily member 5; Bp50; CD40L Receptor; CDw40; TNFRSF5
Species:	Human
Source:	HEK293
Accession:	P25942 (E21-R193)
Gene ID:	958
Molecular Weight:	Approximately 28-32 kDa

PROPERTIES

AA Sequence	E P P T A C R E K Q Y L I N S Q C C S L C Q P G Q K L V S D C T E F T E T E C L P C G E S E F L D T W N R E T H C H Q H K Y C D P N L G L R V Q Q K G T S E T D T I C T C E E G W H C T S E A C E S C V L H R S C S P G F G V K Q I A T G V S D T I C E P C P V G F F S N V S S A F E K C H P W T S C E T K D L V V Q Q A G T N K T D V V C G P Q D R L R
Biological Activity	1. Measured in a cell proliferation assay using human B cells (Ramos). in the presence of 10 ng/mL Human IL-4. The ED_{50} this effect is 0.1268 ng/mL, corresponding to a specific activity is 7.886×10^6 units/mg. 2. Measured by its binding ability in a functional ELISA. Immobilized human CD40 at 2 μg/mL (100 μL/well) can bind human CD40L with a linear range of 15.6-500 ng/mL.
Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS or 20 mM PB, 150 mM NaCl, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	CD40 Protein, acting as the receptor for TNFSF5/CD40LG, is instrumental in transducing signals through TRAF6- and MAP3K8-mediated pathways, leading to the activation of ERK in macrophages and B cells and subsequent induction of

immunoglobulin secretion. Existing in both monomeric and homodimeric forms, CD40 Protein exhibits variations in its homodimeric structure, as observed in the bladder carcinoma cell line Hu549. The receptor interacts with key signaling molecules such as TRAF1, TRAF2, TRAF3, TRAF5, and TRAF6, with the crucial interaction occurring between CD40 Protein, TRAF6, and MAP3K8, thereby playing a pivotal role in ERK activation.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA