ALPHA DIAGNOSTIC INTERNATIONAL

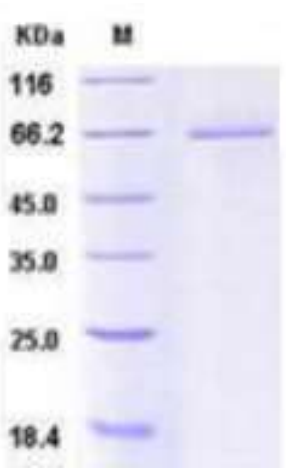
Product Data Sheet

Human CD27 Protein

Cat# HCD2715-R-10 Recombinant (HEK) Human CD27/TNFRSF7 protein (aa: 1-192, >95% Pure, His Tag) **Size:**10 ug

CD27 is a member of the tumor necrosis factor receptor (TNFR) superfamily, which includes TNFR types I and II (CD120a and -b), nerve growth factor receptor (NGFR), CD30 (associated with Hodgkin lymphoma), Fas/Apo-1 (CD95), CD40, 4–1BB and OX40. These receptors are known to play a very important role in cell growth and differentiation, as well as apoptosis or programmed cell death. The homology is restricted to the extracellular region of the family members and is characterized by the presence of a Cys knot motif, which occurs three times in CD27.
CD27 is a glycosylated, type I transmembrane protein of about 55 kDa and exists as homodimers with a disulfide bridge linking the two monomers. The disulfide bridge is in the extracellular domain close to the membrane. The ligand for CD27 is CD70, which belongs to the TNF family of ligands. Unlike CD27, CD70 is a type II transmembrane protein with an apparent molecular mass of 50 kDa. Because of CD70's homology to TNFα and -β, especially in β strands C, D, H, and I, CD70 is predicted to have a trimeric structure, made up of three identical subunits, possibly interacting with three CD27 homodimers. TNFα is also a type II transmembrane protein and is released to the outside by proteolytic cleavage, whereas TNFβ and NGF are secreted. So far, there are no reports as to the existence of a naturally occurring, soluble form of CD70.

Source of Antigen



Human CD27 protein was expressed in human Cells with a carboxy-terminal polyhistidine tagged Fc region of human IgG1 (420 aa, >95%, ~ 47.2 kDa). As a result of glycosylation, the monomer migrates as an approximately 65 kDa band in SDS-PAGE under reducing conditions. Purified protein is Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

Storage

Short-term: unopened, undiluted vials for less than a week at 4°C.

Long-term: at –20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20°C or below.
Shipping: 4°C for solutions and powder.

Recommended Usage

Western Blotting: Load ~100-200 ng/lane for good visibility with appropriate antibodies.

ELISA (Perform serial dilution beginning from 10 ng/ml to generate a standard curve. User must optimize conditions).

Endotoxin: < 1.0 EU per μg of the protein as determined by the LAL method

Specificity:
Human CD27 is 100% conserved in chimpanzees

References: Jiang J, et al. (2010) J Clin Immunol 30(4): 566-73.

**This product is for in vitro research use only.*

Catalog#	Prod Description
CD40F-100 conjugate	Mouse Monoclonal Anti-Human CD40-FITC
CD40F-25 conjugate	Mouse Monoclonal Anti-Human CD40-FITC
CD40P-100	Mouse Monoclonal Anti-Human CD40-PE conjugate
CD01aUL-100	Mouse Monoclonal Anti-Human CD1a, unlabeled
CD02UL-100	Mouse Monoclonal Anti-Human CD2, unlabeled
MCD040-M 3/23) (rat IgG2a)	Rat Monoclonal Anti-Mouse CD40, Purified (Clone
MCD040-PE (rat IgG2b)	Rat Monoclonal Anti-Mouse CD40, PE (Clone 3/23)
CD4011-A unlabeled	Rabbit Anti-Human CD40 IgG, affinity purified,
HCD4015-N-10	Recombinant (E. coli) Human CD40 (aa: 21-193, C-terminal His Tag, >95% Pure)
HCD40L-15-N-10	Recombinant (E. coli) Human CD40L/TNFSF5 (aa:108-261, N-terminal His Tag, >95% Pure)
RCD4015-N-10	Recombinant (E. coli) Rat CD40 (aa: 21-193, C-terminal His Tag, >95% Pure)
AB-13110	Mouse Monoclonal Anti-Human CD8-FITC IgG
AB-13210	Mouse Monoclonal Anti-Human CD4-FITC IgG
AB-17110	Mouse Monoclonal Anti-Human CD5 IgG
AB-17510	Rat Monoclonal Anti-Mouse CD3 IgG

HCD2715-R-10-Rec-human-CD27-protein

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