

## CD70 active protein

CD70 Protein, Human, Recombinant (hFc Tag)

CATALOG #  
**AAA257927**

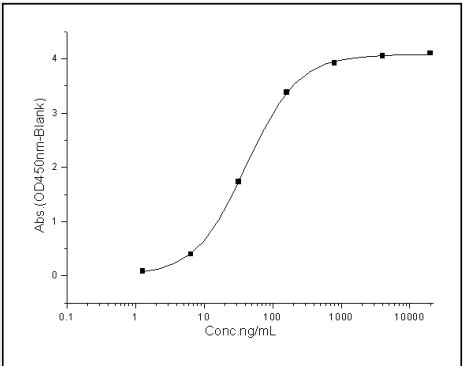
HOST  
**HEK293 Cells**

### PRODUCT SYNONYMS

CD70; CD70 Protein; Human; Recombinant (hFc Tag); Human CD70/CD27L/TNFSF7 Protein (Fc Tag); CD27L Protein; CD27LG Protein; TNFSF7 Protein; CD70 molecule; CD70 active protein

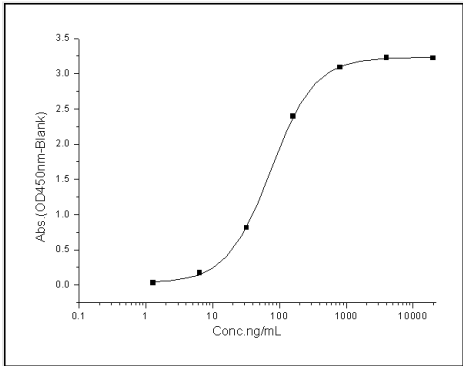
### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | HEK293 Cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Purity/Purification     | >90% as determined by SDS-PAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Form/Format             | Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.                                                                                                                                                                                                                                                                                                      |
| Sequence                | Gln39-Pro1 93                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Species                 | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Endotoxin               | <1.0EU per ug of the protein as determined by the LAL method                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Predicted N Terminal    | Glu 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Tag                     | N-human IgG1-Fc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Protein Construction    | A DNA sequence encoding the extracellular domain of human CD70 (NP_001243.1)(Gln 39-Pro 193) was fused with the Fc region of human IgG1 at the N-terminus via a polypeptide linker.                                                                                                                                                                                                                                                                                                                                     |
| Reconstitution          | A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.                                                                                                                                                                                                                                                                                                                                                                                         |
| Activity                | Measured by its binding ability in a functional ELISA. Immobilized Human CD27 His at 2ug/ml (100uL/well) can bind Human CD70 hFc. The EC50 of Human CD70 hFc is 15-60ng/mL.                                                                                                                                                                                                                                                                                                                                             |
| Preparation and Storage | <p>Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.</p> <p>In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid.</p> <p>They are shipped out with blue ice.</p> |



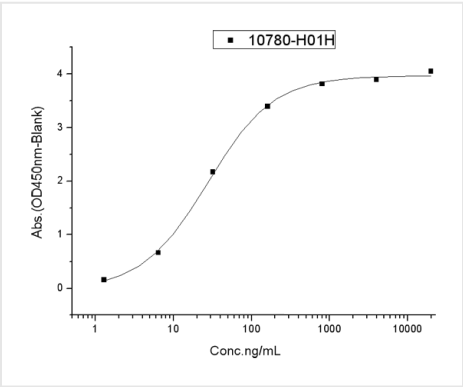
Application Data

Measured by its binding ability in a functional ELISA. Immobilized human CD70 at 10 ug/mL (100 ul/well) can bind human CD27 with a linear range of 40-60 ng/mL.



Application Data

Measured by its binding ability in a functional ELISA. Immobilized human CD70 at 10 ug/mL (100 ul/well) can bind mouse CD27 with a linear range of 70-90 ng/mL.



Application Data

Measured by its binding ability in a functional ELISA. Immobilized Human CD27 His at 2 ug/ml (100 ul/well) can bind Human CD70 hFc, the EC50 of Human CD70 hFc is 15-60 ng/mL.



SDS-PAGE

ADDITIONAL INFORMATION

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for CD70 active protein | Background: CD70, a member of the tumor necrosis factor superfamily, is restricted to activated T-and B-lymphocytes and mature dendritic cells. Binding of CD70 to its receptor, CD27, is important in priming, effector functions, differentiation and memory formation of T-cells as well as plasma and memory B-cell generation. Tight control of CD70 expression is required to prevent lethal immunodeficiency. By selective transcription, CD70 is largely confined to activated lymphocytes and dendritic cells (DC). As a type II transmembrane receptor, CD70 is normally expressed on a subset of B, T and NK cells, where it plays a costimulatory role in immune cell activation. Immunohistochemical analysis of CD70 expression in multiple carcinoma types. The restricted expression pattern of CD70 in normal tissues and its widespread expression in various malignancies makes it an attractive target for antibody-based therapeutics. Investigations to exploit CD70 as a cancer target have lead to the identification of potential antibody-based clinical candidates. |
| Product Categories/Family for CD70 active protein   | Cancer Drug Targets                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| References                                          | Adam PJ, et al. (2006) CD70 (TNFSF7) is expressed at high prevalence in renal cell carcinomas and is rapidly internalised on antibody binding. Br J Cancer. 95(3): 298-306.Keller AM, et al. (2007) Costimulatory ligand CD70 is delivered to the immunological synapse by shared intracellular trafficking with MHC class II molecules. Proc Natl Acad Sci U S A. 104(14): 5989-94.Grewal IS. (2008) CD70 as a therapeutic target in human malignancies. Expert Opin Ther Targets. 12(3): 341-51.Boursalian TE, et al. (2009) Targeting CD70 for human therapeutic use. Adv Exp Med Biol. 647: 108-19.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

NCBI AND UNIPROT INFORMATION

|             |         |
|-------------|---------|
| NCBI GI #   | 4507605 |
| NCBI GeneID | 970     |

|                                  |                                                                                                                                                                                 |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI Accession #                 | NP_001243.1                                                                                                                                                                     |
| NCBI GenBank Nucleotide #        | NM_001252.3                                                                                                                                                                     |
| UniProt Accession #              | P32970; Q96J57                                                                                                                                                                  |
| Molecular Weight                 | 21,118 Da                                                                                                                                                                       |
| NCBI Official Full Name          | CD70 antigen                                                                                                                                                                    |
| NCBI Official Synonym Full Names | CD70 molecule                                                                                                                                                                   |
| NCBI Official Symbol             | CD70                                                                                                                                                                            |
| NCBI Official Synonym Symbols    | CD27L; CD27LG; TNFSF7                                                                                                                                                           |
| NCBI Protein Information         | CD70 antigen; CD27-L; CD27 ligand; Ki-24 antigen; surface antigen CD70; tumor necrosis factor ligand superfamily member 7; tumor necrosis factor (ligand) superfamily, member 7 |
| UniProt Protein Name             | CD70 antigen                                                                                                                                                                    |
| UniProt Gene Name                | <b>CD70</b>                                                                                                                                                                     |
| UniProt Synonym Gene Names       | CD27L; CD27LG; TNFSF7; CD27-L                                                                                                                                                   |
| UniProt Entry Name               | CD70_HUMAN                                                                                                                                                                      |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/hek293-cells-active-protein/cd70/257927>