

## CD4 active protein

Recombinant human CD4 protein

|                              |                       |                                 |
|------------------------------|-----------------------|---------------------------------|
| CATALOG #<br><b>AAA48979</b> | HOST<br><b>HEK293</b> | APPLICATIONS<br><b>SDS-Page</b> |
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### PRODUCT SYNONYMS

CD4; Recombinant human CD4 protein; T-cell surface glycoprotein CD4; CD4mut; T-cell surface glycoprotein CD4 isoform 1; T-cell surface antigen T4/Leu-3; OKT4D; CD4 active protein

### PRODUCT SPECIFICATIONS

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Purity/Purification                            | 90% by SDS-PAGE                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Form/Format                                    | Liquid in. Phosphate-Buffered Saline (pH7.4) containing 40% glycerol                                                                                                                                                                                                                                                                                                                                                                     |
| Concentration                                  | 0.25mg/ml (determined by Absorbance at 280nm) (varies by lot)                                                                                                                                                                                                                                                                                                                                                                            |
| Sequence Positions                             | 26-390aa                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Sequence                                       | Lys26<br>K KVLGKKGDT VELTCTASQK KSIQFHWKNS NQIKILGNQG SFLTKGPSKL NDRADSRRL WDQGNFPLII<br>KNLKIEDSDT YICEVEDQKE EVQLLVFGLT ANSDTHLLQG QSLTLTLESP PGSSPSVQCR SPRGKNIQGG<br>KTLSVSQLEL QDSGTWTCTV LQNQKKVEFK IDIVLAFQK ASSIVYKKEG EQVEFSFPLA FTVEKLTGSG<br>ELWWQAERAS SSKSWITFDL KNKEVSVKRV TQDPKLQMGK KLPLHLTL PQ ALPQYAGSGN LTLALEAKTG<br>KLHQEVNLVV MRATQLQKNL TCEVWGPTSP KLMLSLKLEN KEAKVSKREK AVWVLNPEAG MWQCLLSDSG<br>QVLLESNIKV LPTW |
| Applicable Applications for CD4 active protein | Bioactivity, SDS-PAGE                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Species                                        | Human                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Endotoxin                                      | <1 EU per 1ug of protein (determined by LAL method)                                                                                                                                                                                                                                                                                                                                                                                      |
| Tag                                            | hIgG-His-Tag                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Preparation and Storage                        | Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.                                                                                                                                                                                                                                                                                            |

### ADDITIONAL INFORMATION

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| Related Product Information for CD4 active protein | CD4, also known as T-cell surface antigen T4/Leu-3, is a member of the immunoglobulin superfamily. It is a glycoprotein expressed on the surface of T helper cells, regulatory T cells, monocytes, macrophages, and dendritic cells. It interacts directly with MHC class II molecules on the surface of the antigen presenting cell via its extracellular domain. It is a co-receptor that assists the T cell receptor (TCR) to activate its T cell following an interaction with an antigen presenting cell. Also, it binds directly to MHC class II molecules on antigen presenting cells. This interaction contributes to the formation of the immunological synapse which is focused around the TCR-MHC class II-antigenic peptide interaction. Recombinant human CD4, fused to hIgG-His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques. |
| Product Categories/Family for CD4 active protein   | <a href="#">Immunology</a> ; <a href="#">Proteins</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| References                                         | Singh SK., et al. (2012) FEBS J. 279:3705-3714.<br>Farrar WL., et al. (1988) Crit Rev Immunol. 8:315-339.<br>Doyle, C. and J.L. Strominger (1987) Nature 330:256-259.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                   |
|----------------------------------|---------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 10835167                                                                                          |
| NCBI GeneID                      | 920                                                                                               |
| NCBI Accession #                 | NP_000607.1                                                                                       |
| NCBI GenBank Nucleotide #        | NM_000616.4                                                                                       |
| UniProt Accession #              | P01730; Q4ZGK2; Q5U066; Q9UDE5; B2R737; D3DUS5                                                    |
| Molecular Weight                 | 51,111 Da                                                                                         |
| NCBI Official Full Name          | T-cell surface glycoprotein CD4 isoform 1                                                         |
| NCBI Official Synonym Full Names | CD4 molecule                                                                                      |
| NCBI Official Symbol             | CD4                                                                                               |
| NCBI Official Synonym Symbols    | CD4mut                                                                                            |
| NCBI Protein Information         | T-cell surface glycoprotein CD4; CD4 receptor; CD4 antigen (p55); T-cell surface antigen T4/Leu-3 |
| UniProt Protein Name             | T-cell surface glycoprotein CD4                                                                   |
| UniProt Gene Name                | CD4                                                                                               |
| UniProt Entry Name               | CD4_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-active-protein/cd4/48979>