

PRODUCT INFORMATION

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| Target | CD56 |
| Synonyms | NCAM1;CD56;MSK39;NCAM |
| Description | Recombinant Human CD56 Protein with C-terminal 6×His tag |
| Delivery | In Stock |
| Uniprot ID | P13591 |
| Expression Host | HEK293 |
| Tag | C-6×His Tag |
| Molecular Characterization | CD56(Leu20-Gly708) 6×His tag |
| Molecular Weight | The protein has a predicted molecular mass of 77.0 kDa after removal of the signal peptide. The apparent molecular mass of CD56-His is approximately 100-130 kDa due to glycosylation. |
| Purity | The purity of the protein is greater than 90% as determined by SDS-PAGE and Coomassie blue staining. |
| Formulation & Reconstitution | Lyophilized from sterile PBS, pH 7.4. Normally 5% - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution. |
| Storage & Shipping | Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature. |
| Background | This gene encodes a cell adhesion protein which is a member of the immunoglobulin superfamily. The encoded protein is involved in cell-to-cell interactions as well as cell-matrix interactions during development and differentiation. The encoded protein plays a role in the development of the nervous system by regulating neurogenesis, neurite outgrowth, and cell migration. This protein is also involved in the expansion of T lymphocytes, B lymphocytes and natural killer (NK) cells which play an important role in immune surveillance. This protein plays a role in signal transduction by interacting with fibroblast growth factor receptors, N-cadherin and other components of the extracellular matrix and by triggering signalling cascades involving FYN-focal adhesion kinase (FAK), mitogen-activated protein kinase (MAPK), and phosphatidylinositol 3-kinase (PI3K). One prominent isoform of this gene, cell surface molecule CD56, plays a role in several myeloproliferative disorders such as acute myeloid leukemia and differential expression of this gene is associated with differential disease progression. For example, increased expression of CD56 is correlated with lower survival in acute myeloid leukemia patients whereas increased severity of COVID-19 is correlated with decreased abundance of CD56-expressing NK cells in peripheral blood. Alternative splicing results in multiple transcript variants encoding distinct protein isoforms. |
| Usage | Research use only |



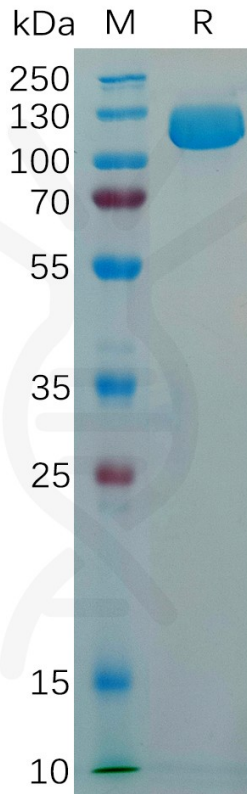


Figure 1. Human CD56 Protein, His Tag on SDS-PAGE under reducing condition.

Human CD56, His Tagged protein ELISA

0.2 μg of Human CD56, His tagged protein per well

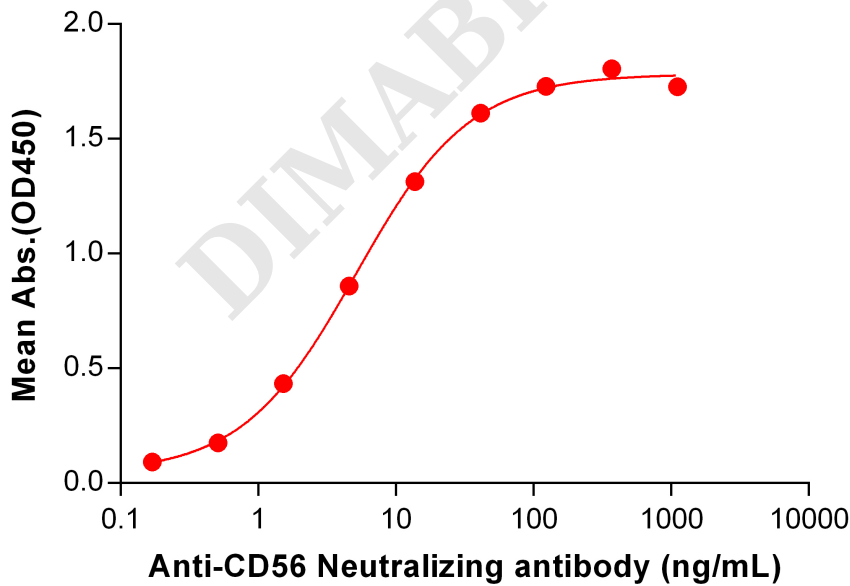


Figure 2. ELISA plate pre-coated by 2 $\mu\text{g}/\text{mL}$ (100 $\mu\text{L}/\text{well}$) Human CD56 Protein, His Tag (PME100194) can bind Anti-CD56 Neutralizing antibody BME100102 in a linear range of 0.51-41.15 ng/mL.

