

PRODUCT INFORMATION

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| Target | CD33 |
| Synonyms | CD33;SIGLEC3;gp67 |
| Description | Recombinant human CD33 protein with C-terminal human Fc tag |
| Delivery | In Stock |
| Uniprot ID | P20138 |
| Expression Host | HEK293 |
| Tag | C-Human Fc Tag |
| Molecular Characterization | CD33(Asp140-His259) hFc(Glu99-Ala330) |
| Molecular Weight | The protein has a predicted molecular mass of 38.9 kDa after removal of the signal peptide. |
| Purity | The purity of the protein is greater than 95% 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 | Sialic-acid-binding immunoglobulin-like lectin (Siglec) that plays a role in mediating cell-cell interactions and in maintaining immune cells in a resting state. Preferentially recognizes and binds alpha-2,3- and more avidly alpha-2,6-linked sialic acid-bearing glycans. Upon engagement of ligands such as C1q or sialylated glycoproteins, two immunoreceptor tyrosine-based inhibitory motifs (ITIMs) located in CD33 cytoplasmic tail are phosphorylated by Src-like kinases such as LCK. These phosphorylations provide docking sites for the recruitment and activation of protein-tyrosine phosphatases PTPN6/SHP-1 and PTPN11/SHP-2. In turn, these phosphatases regulate downstream pathways through dephosphorylation of signaling molecules. One of the repressive effect of CD33 on monocyte activation requires phosphoinositide 3-kinase/PI3K. |
| Usage | Research use only |
| Conjugate | Unconjugated |



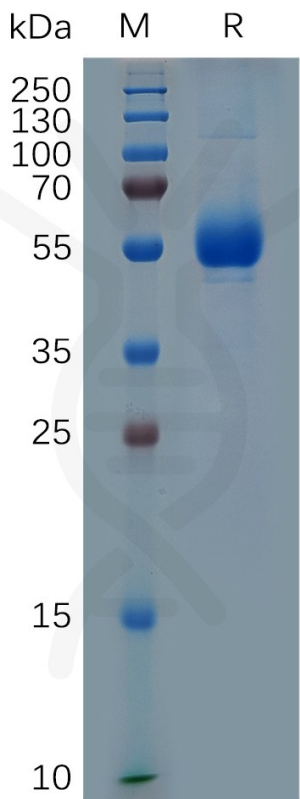


Figure 1. Human CD33, hFc Tag on SDS-PAGE under reducing condition.

