

HUMAN CD38 PROTEIN, HFC-HIS TAG

Cat.#: 11132

Product Name: Human CD38 Protein

Size: 10 µg, 50 µg and 100 µg

Synonyms: CD38;T10;cADPr hydrolase 1

Target: CD38

UNIPROT ID: P28907

Description: Recombinant human CD38 protein with C-terminal human Fc and 6xHis tag

Background: CD antigen CD38 is also known as ADP-ribosyl cyclase 1, which belongs to the ADP-ribosyl cyclase family. CD38 is expressed at high levels in pancreas, liver, kidney, brain, testis, ovary, placenta, malignant lymphoma and neuroblastoma. CD38 is a multifunctional ectoenzyme that catalyzes the synthesis and hydrolysis of cyclic ADP-ribose (cADPR) from NAD to ADP-ribose. These reaction products are essential for the regulation of intracellular Ca²⁺. The loss of CD38 function is associated with impaired immune responses, metabolic disturbances, and behavioral modifications. The CD38 protein is a marker of cell activation. It has been connected to HIV infection, leukemias, myelomas, solid tumors, type II diabetes mellitus and bone metabolism. CD38 has been used as a prognostic marker in leukemia.

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 70-72 kDa after removal of the signal peptide.

Molecular Characterization: CD38(Val43-Ile300) hFc(Glu99-Ala330) 6xHis tag

Purity: The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

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.

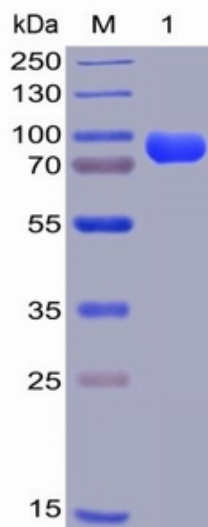


Figure 1. Human CD38, hFc-His Tag on SDS-PAGE under reducing condition.

Human CD38, hFc-His Tagged protein ELISA

0.2 µg Human CD38, hFc-His Tagged protein per well

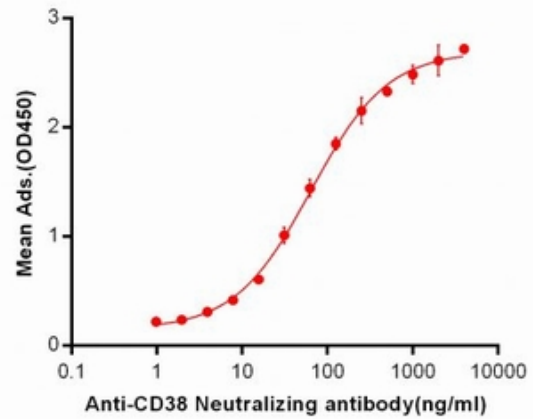


Figure 2. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human CD38, hFc-His tagged protein (11132) can bind Anti-CD38 Neutralizing antibody 28013 in a linear range of 0.98–64.14 ng/ml.