

HUMAN CD38 PROTEIN, HFC TAG

Cat.#: 11330

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 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 56.0 kDa after removal of the signal peptide. The apparent molecular mass of CD38-hFc is approximately 70-100 kDa due to glycosylation.

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

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.

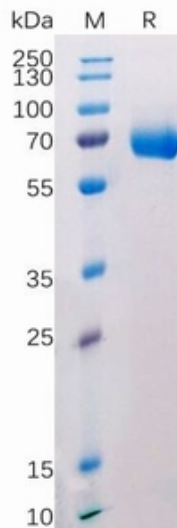


Figure 1. Human CD38, hFc Tag on SDS-PAGE under reducing condition.

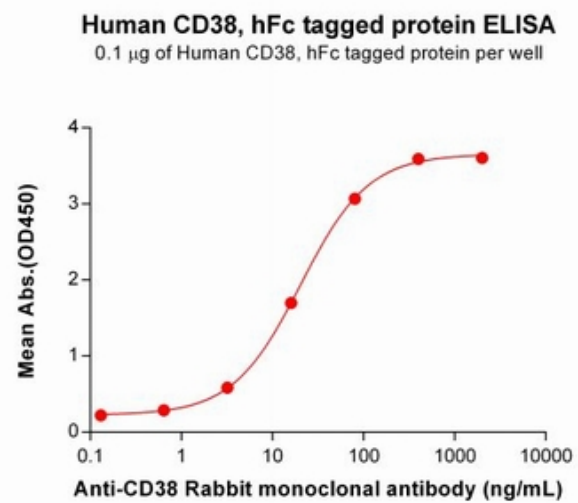


Figure 2. ELISA plate pre-coated by 1 μ g/ml (100 μ l/well) Human CD38, hFc tagged protein (11132) can bind anti-CD38 antibody, Rabbit mAb clone:DM30 in a linear range of 0.64–80 ng/ml.