

PRODUCT INFORMATION

Target	CD38
Synonyms	CD38, T10, cADPr hydrolase 1
Description	Recombinant human CD38 protein with C-terminal human Fc tag
Delivery	In Stock
Uniprot ID	P28907
Expression Host	HEK293
Tag	C-Human Fc tag
Molecular Characterization	CD38(Val43-Ile300) hFc(Glu99-Ala330)
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.
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.
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	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 Ca ²⁺ . 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.
Usage	Research use only
Conjugate	Unconjugated





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

Human CD38, hFc tagged protein ELISA

0.1 μg of Human CD38, hFc tagged protein per well

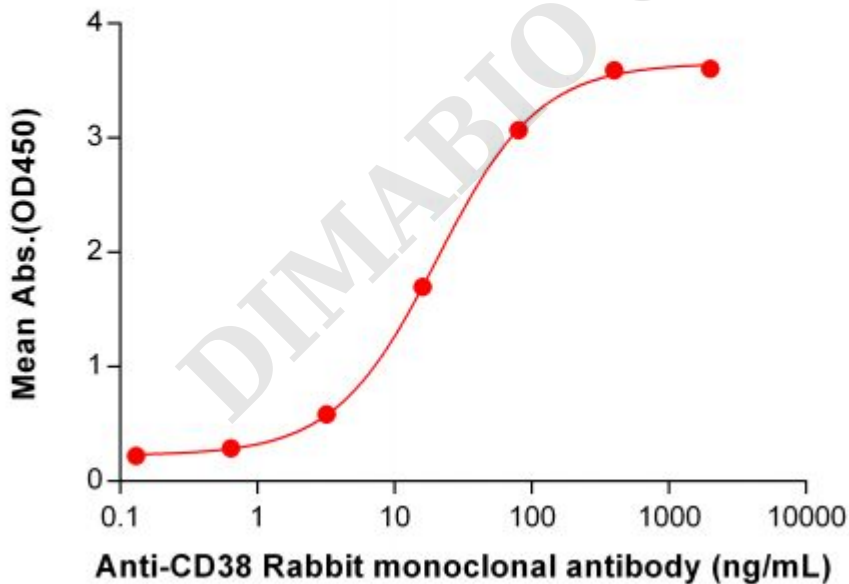


Figure 2. ELISA plate pre-coated by 1 $\mu\text{g}/\text{ml}$ (100 $\mu\text{l}/\text{well}$) Human CD38, hFc tagged protein (PME100530) can bind anti-CD38 antibody, Rabbit mAb (clone:DM30) in a linear range of 0.64-80 ng/ml.

