

## PRODUCT INFORMATION

<b>Target</b>	CD38
<b>Synonyms</b>	CD38, T10, cADPr hydrolase 1
<b>Description</b>	Recombinant human CD38 protein with C-terminal human Fc tag
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	P28907
<b>Expression Host</b>	HEK293
<b>Tag</b>	C-Human Fc tag
<b>Molecular Characterization</b>	CD38(Val43-Ile300) hFc(Glu99-Ala330)
<b>Molecular Weight</b>	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.
<b>Purity</b>	The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.
<b>Formulation &amp; Reconstitution</b>	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.
<b>Storage &amp; Shipping</b>	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.
<b>Background</b>	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 <sup>+</sup> to ADP-ribose. These reaction products are essential for the regulation of intracellular Ca <sup>2+</sup> . 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.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



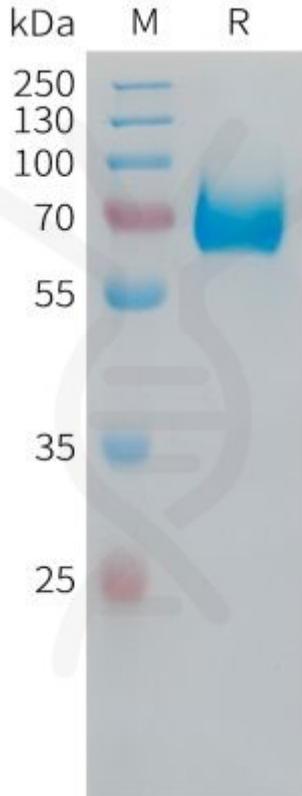


Figure 1. Human CD38, hFc Tag on SDS-PAGE under reducing condition.

### Human CD38, hFc tagged protein ELISA

0.1  $\mu$ g of Human CD38, hFc tagged protein per well

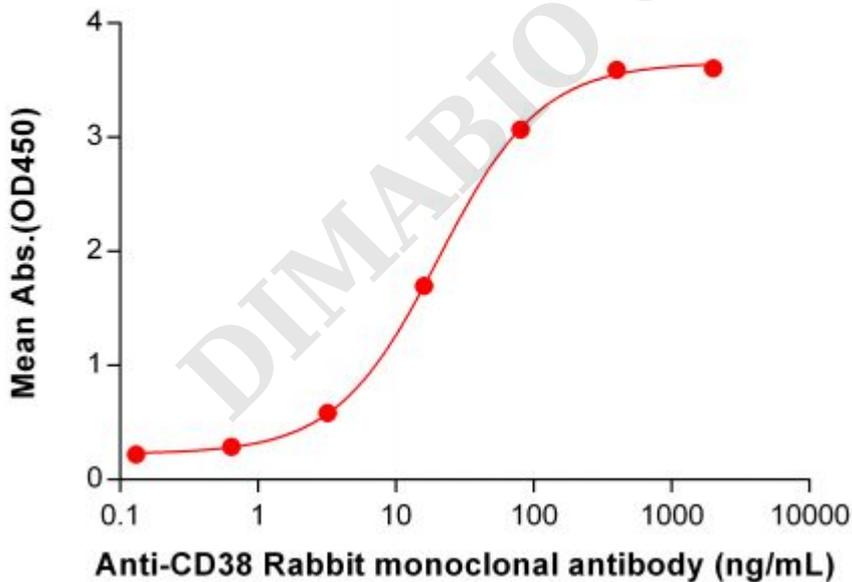


Figure 2. ELISA plate pre-coated by 1  $\mu$ g/ml (100  $\mu$ l/well) Human CD38, hFc tagged protein (PME100530) can bind anti-CD38 antibody, Rabbit mAb (clone:DM30) in a linear range of 0.64-80 ng/ml.

