

# Human CD38 Protein

Cat. No. CD3-HM138



## Description

<b>Source</b>	Recombinant Human CD38 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Val43-Ile300.
<b>Accession</b>	P28907-1
<b>Molecular Weight</b>	The protein has a predicted MW of 30.7 kDa. Due to glycosylation, the protein migrates to 45-58 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

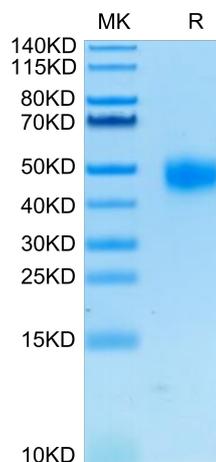
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

CD38 (cluster of differentiation 38), also known as cyclic ADP ribose hydrolase, is a transmembrane glycoprotein found on the surface of some immune cells including plasma cells, activated or immature T and B cells, monocytes, and natural killer cells. CD38 participates in cell adhesion, signal transduction and calcium signaling.

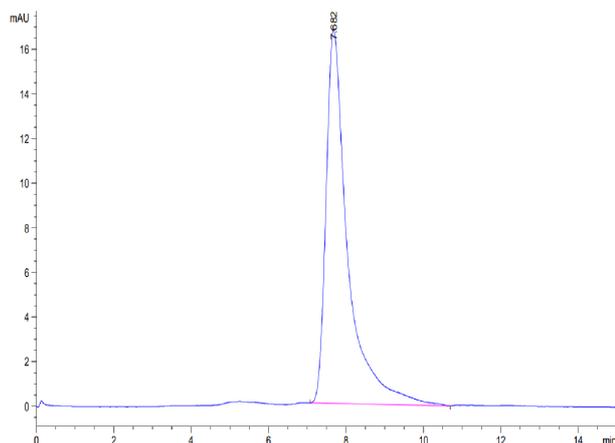
## Assay Data

### Tris-Bis PAGE



Human CD38 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



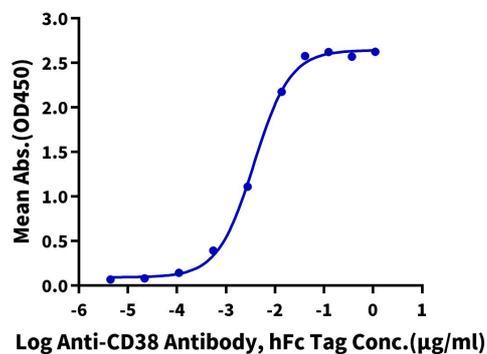
The purity of Human CD38 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

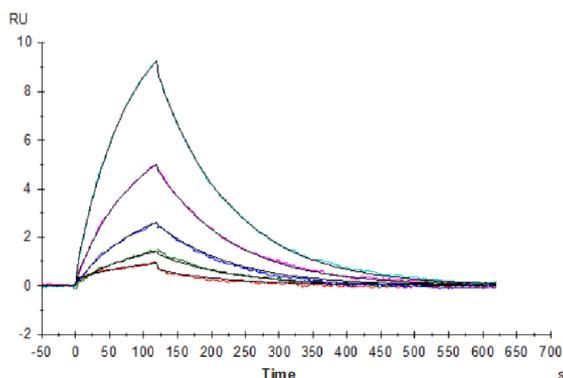
**Human CD38, His Tag ELISA**

0.1µg Human CD38, His Tag Per Well



Immobilized Human CD38, His Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Anti-CD38 Antibody, hFc Tag with the EC50 of 3.7ng/ml determined by ELISA (QC Test).

SPR Data



Anti-CD38 Antibody captured on Protein A chip, can bind Human CD38, His Tag with an affinity constant of 0.23µM as determined in a SPR assay (Biacore T200).