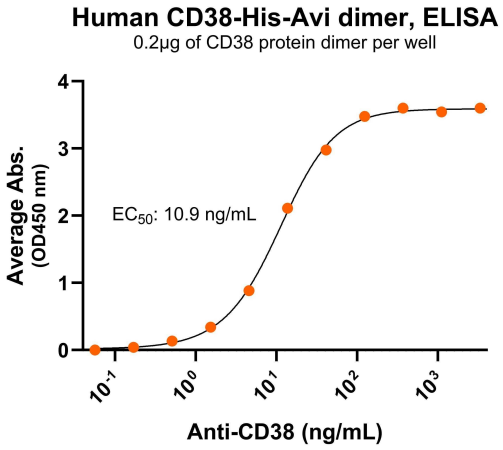
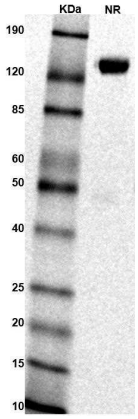
Bioactivity – Antibody Binding



Immobilized human CD38 protein dimer, His-Avi tag (Cat. No. CSP-24096-03) at 2 μg/mL (100 μL/well) can bind anti-human CD38 polyclonal antibody with half maximal effective concentration (EC50) range of 5.4-21.8 ng/mL (QC tested).

SDS-PAGE



MW: Molecular Weight marker reduced condition
NR: CD38 dimer under non-reduced condition

The migration range of the heterodimer protein with glycosylation under non-reducing conditions is between 120 and 190 kDa on SDS PAGE.

Human CD38 Protein Dimer, His-Avi Tag
Product Code: CSP-24096-03
For Research Use Only (RUO)

Expression Host
HEK293T

Protein Name
CD38

Purity
Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition

Alternate Name(s)
cyclic ADP ribose hydrolase, ADPRC1, ADPRC 1

Protein Construct
CD38 dimer protein contains the CD38 extracellular domain (UniProt# P28907) fused with a proprietary cis-dimer motif followed by a tandem His-Avi tag at the C-terminus. Expressed in HEK293T cell line.

Amino Acid Range
1: V43-I300

SDS-Page Molecular Weight
80 kDa. The migration range of the heterodimer protein with glycosylation under non-reducing conditions is between 120 and 190 kDa on SDS PAGE.

Formulation
0.22μm filtered PBS, pH 7.4

Shipping Conditions
Frozen Dry Ice

Stability & Storage
-80^{0}C

Background

Human Cluster of Differentiation 38 (CD38), also known as cyclic ADP ribose hydrolase, is a glycoprotein found mainly on plasma B cells and natural killer cells. CD38 naturally forms homodimers on the cell surface and functions as an ectoenzyme and as a receptor. CD38 serves as a major regulator of NAD+ levels using its extracellular domain to catalyze the synthesis of ADP ribose (ADPR) and cyclic ADP-ribose (cADPR) from NAD+. CD38 interacts with CD31 on the surface of T cells to activate the production of a variety of cytokines. CD38 is often overexpressed in cancers including multiple myeloma and NK-T cell lymphomas, contributing to cancer cell proliferation, migration, and survival. CD38 expressed on immune cells and airway smooth muscle cells also plays an important role in asthma by influencing inflammation and airway hyper-responsiveness. CD38 is an emerging therapeutic target for several cancers as well as asthma.