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Recombinant Mouse CD38 Protein

Catalog No.: RP01507 Recombinant

Sequence Information

Species Gene ID Swiss ProtMouse 12494 P56528

Tags C-His

Synonyms
ADPRC 1;ADPRC1;T10;CD38

Product Information

Source Purification
HEK293 cells > 95% by SDSPAGE.

Endotoxin

<0.1EU/µg

Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.

Reconstitution

Centrifuge the vial before opening.
Reconstitute to a concentration of
0.1-0.5 mg/mL in sterile distilled water.
Avoid votex or vigorously pipetting the
protein. For long term storage, it is
recommended to add a carrier protein
or stablizer (e.g. 0.1% BSA, 5% HSA,
10% FBS or 5% Trehalose), and aliquot
the reconstituted protein solution to
minimize free-thaw cycles.

Contact

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Background

The cluster of differentiation (CD) system is commonly used as cell markers in Immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. Cluster of differentiation 38 (CD38), also known as ADP-ribosyl cyclase, is a glycoprotein found on the surface of many immune cells (white blood cells), including CD4+, CD8+, B and natural killer cells. It shares several characteristics with ADP-ribosyl cyclase 2 CD157. CD38 is a multifunctional ectoenzyme that catalyzes the synthesis and hydrolysis of cyclic ADP-ribose (cADPR) from NAD+ to ADP-ribose. It also functions in cell adhesion, signal transduction and calcium signaling. CD38 has been used as a prognostic marker in leukemia. It can also be used to identify plasma cells.

Basic Information

Description

Recombinant Mouse CD38 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Leu45-Thr304) of mouse CD38 (Accession #NP_031672.2) fused with a 6×His tag at the C-terminus.

Bio-Activity

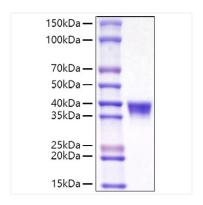
Measured by its binding ability in a functional ELISA. Immobilized Mouse CD38 at $5\mu g/mL$ (100 $\mu L/well$) can bind CD38 Rabbit pAb (Catalog:A1680) with a linear range of 0.3-177.02 ng/mL.

Storage

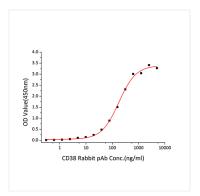
Store the lyophilized protein at -20°C to -80°C for 12 months. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

Validation Data



Recombinant Mouse CD38 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 35-40kDa.



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