Recombinant Mouse CD38/ADPRC1 protein (His Tag)

Catalog Number: PDEM100287



| Description    |  |
|----------------|--|
| Species        | Mouse  |
| Source         | E.coli-derived Mouse CD38 protein Leu45-Thr304, with an N-terminal His                   |
| Mol_Mass       | 28.5 kDa   |
| Accession      | P56528   |
| Bio-activity   | Not validated for activity   |
| Properties     |  |
| Purity         | > 95% as determined by reducing SDS-PAGE.  |
| Endotoxin      | < 10 EU/mg of the protein as determined by the LAL method                                |
| Storage        | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 |
|                | °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of      |
|                | reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.                      |
| Shipping       | This product is provided as lyophilized powder which is shipped with ice packs.          |
| Formulation    | Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5%              |
|                | Mannitol.  |
| Reconstitution | It is recommended that sterile water be added to the vial to prepare a stock solution of |
|                | 0.5 mg/mL. Concentration is measured by UV-Vis.  |

Note: Centrifuge before opening to ensure complete recovery of vial contents.

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> 95 % as determined by reducing SDS-PAGE.

## Background

Data

The cluster of differentiation (CD) system is commonly used as cell markers in immunophynotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which 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.

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