

ARG70497 Mouse CD38 recombinant protein (His-tagged)

Package: 100 µg
Store at: -20°C

Summary

Product Description	CHO expressed, His-tagged Mouse CD38 recombinant protein.
Tested Application	SDS-PAGE
Target Name	CD38
Species	Mouse
A.A. Sequence	Leu45-Thr304
Expression System	CHO
Alternate Names	CD38; CD38 Molecule; ADP-Ribosyl Cyclase 1; CADPR1; ADP-Ribosyl Cyclase/Cyclic ADP-Ribose Hydrolase 1; 2'-Phospho-Cyclic-ADP-Ribose Transferase; 2'-Phospho-ADP-Ribosyl Cyclase; Cyclic ADP-Ribose Hydrolase 1; NAD(+) Nucleosidase; CD38 Antigen (P45); ADPRC 1; 2'-Phospho-ADP-Ribosyl Cyclase/2'-Phospho-Cyclic-ADP-Ribose Transferase; Ecto-Nicotinamide Adenine Dinucleotide Glycohydrolase; Cluster Of Differentiation 38; CADPR Hydrolase 1; CD38 Antigen; EC 2.4.99.20; EC 3.2.2.-; EC 3.2.2.6; ADPRC1; T10

Properties

Form	Powder
Purification	>95% (by SDS-PAGE)
Purification Note	Endotoxin level is less than 0.1 EU/µg of the protein, as determined by the LAL test.
Buffer	PBS (pH 7.4)
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 200 µg/mL and incubate the stock solution for at least 20 min at room temperature to make sure the protein is dissolved completely.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C or -80°C for up to one month. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	CD38
Gene Full Name	CD38 Molecule
Background	The protein encoded by this gene is a non-lineage-restricted, type II transmembrane glycoprotein that synthesizes and hydrolyzes cyclic adenosine 5'-diphosphate-ribose, an intracellular calcium ion mobilizing messenger. The release of soluble protein and the ability of membrane-bound protein to become internalized indicate both extracellular and intracellular functions for the protein. This protein has an N-terminal cytoplasmic tail, a single membrane-spanning domain, and a C-terminal extracellular region with four N-glycosylation sites. Crystal structure analysis demonstrates that the functional molecule is a dimer, with the central portion containing the catalytic site. It is used as a prognostic marker for patients with chronic lymphocytic leukemia. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]

Function

Synthesizes the Ca²⁺ mobilizer nicotinate-adenine dinucleotide phosphate, NAADP⁺, from 2'-phospho-cADPR and nicotinic acid, as well as from NADP⁺ and nicotinic acid. At both pH 5.0 and pH 7.4 preferentially transforms 2'-phospho-cADPR into NAADP⁺, while preferentially cleaving NADP⁺ to cADPR and ADPRP rather than into NADDP⁺ (PubMed:16690024).
Has cADPR hydrolase activity (PubMed:7961800, PubMed:8253715).[Uniprot]