For Research Use Only

Recombinant Human CD38 protein (Myc Tag, His Tag) (HPLC verified)



Catalog Number: Eg0110

Basic Information

Species: Human

Purity: >90 %, SDS-PAGE
> >90 %, SDS-PAGE
 SÉC-HPLC

Tag: Myc Tag, His Tag

Technical Specifications

>90 %, SDS-PAGE
 >90 %, SEC-HPLC

Endotoxin Level:

<0.1 EU/ µg protein, LAL method

HEK293-derived Human CD38 protein Val43-Ile300 (Accession# P28907-1) with a Myc tag and a His tag at the Cterminus.

GeneID: 952

Accession: P28907-1

Predicted Molecular Mass: 34.9 kDa

SDS-PAGE

38-55 kDa, reducing (R) conditions

Lyophilized from 0.22 $\,\mu$ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Until expiry date, -20° to -80° as lyophilized proteins. 3 months, -20° to -80° under sterile conditions after reconstitution.

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

CD38, also known as ADP-ribosyl cyclase 1, is a type II transmembrane glycoprotein with a short N-terminal cytoplasmic tail, a single membrane-spanning domain, and a C-terminal extracellular region with four N-glycosylation sites. The extracellular domain of CD38 has bifunctional enzyme activities that catalyze synthesis of cyclic ADP ribose from nicotinamide adenine dinucleotide (NAD) and hydrolysis of cyclic ADP ribose to adenosine diphosphoribose. CD38 is expressed on a variety of hematopoietic and nonhematopoietic cells and is involved in diverse processes such as generation of calcium-mobilizing metabolites, cell activation, and chemotaxis. In addition to the membrane form, CD38 can also exist as a soluble form (sCD38), which is derived from the membrane form by proteolytic cleavage occurring near the

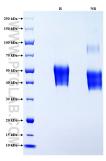
References

1. Jackson DG. et al. J Immunol. 1990; 144(7):2811-2815. 2. Funaro A. et al.1996; 8(11):1643-1650. 3. Cho YS. et al. J Biol Chem. 2000; 275(3):1685-1690. 4. Lebedev MJ. et al. 2004; 30(6):552-556. 5. Schneider M. et al. PLoS One. 2015; 10(5):e0126007.

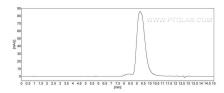
Synonyms

2'-phospho-ADP-ribosyl cyclase, 2'-phospho-ADP-ribosyl cyclase/2'-phospho-cyclic-ADP-ribose transferase, 2'-phospho-cyclic-ADP-ribose transferase, ADP ribosyl cyclase 1, ADPRC 1

Selected Validation Data



Purity of Recombinant Human CD38 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.



The purity of Human CD38 was greater than 90% as determined by SEC-HPLC.