

Recombinant Human CD38 Protein

Catalog No.: RP00151 Recombinant

Sequence Information

| | | |
|----------------|----------------|-------------------|
| Species | Gene ID | Swiss Prot |
| Human | 952 | P28907 |

Tags

C-His

Synonyms

CD38;ADPRC 1;ADPRC1

Product Information

| | |
|---------------|--|
| Source | Purification |
| HEK293 cells | ≥ 95 % as determined by SDS-PAGE; ≥95 % as determined by HPLC. |

| | |
|----------------------|--------------------|
| Calculated MW | Observed MW |
| 30.71 kDa | 40-55 kDa |

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

Reconstitution

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

Contact

| | | |
|--|--|---------------------------|
|  | | 400-999-6126 |
|  | | cn.market@abclonal.com.cn |

Background

The protein 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.

Basic Information

Description

Recombinant Human CD38 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Val43-Ile300) of human CD38 (Accession #NP_001766.2) fused with a 6×His tag at the C-terminus.

Bio-Activity

1. Measured by its binding ability in a functional ELISA. Immobilized Human CD38 Protein at 1 μg/mL (100 μL/well) can bind CD38 Rabbit pAb with a linear range of 0.244-3.2 ng/mL. 2. Loaded CD38 Rabbit mAb (Catalog: A20215) on ProA Biosensor, can bind Human CD38 Protein, C-His (Catalog: RP00151) with an affinity constant of 4.1 nM as determined in BLI assay (Gator).

Shipping

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

Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

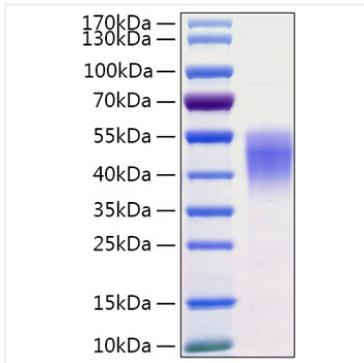
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

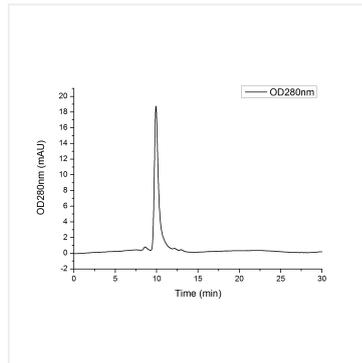
Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

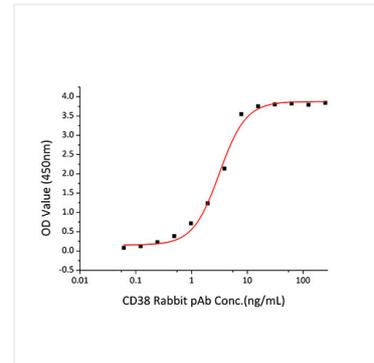
Validation Data



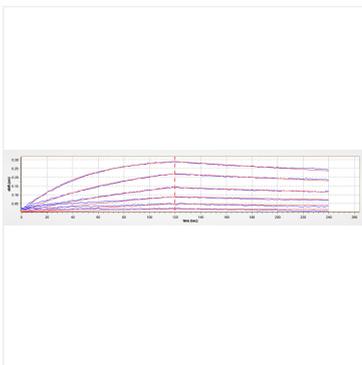
Recombinant Human CD38 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



The purity of Human CD38 Protein (Cat.RP00151) was greater than 95% as determined by SEC-HPLC.



Immobilized Human CD38 Protein at 1 μ g/mL (100 μ L/well) can bind CD38 Rabbit pAb with a linear range of 0.244-3.2 ng/mL.



Loaded CD38 Rabbit mAb (Catalog:A20215) on ProA Biosensor, can bind Human CD38 Protein, C-His (Catalog: RP00151) with an affinity constant of 4.1 nM as determined in BLI assay (Gator).