

Rat ART4 Protein (His Tag)

Catalog Number: 80383-R08H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

ART4

Protein Construction:

A DNA sequence encoding the rat ART4 (NP_001166980.1)(Met1-Lys269) was expressed with a polyhistidine tag at the C-terminus.

Source: Rat

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Predicted N terminal: Gly 30

Molecular Mass:

The recombinant rat ART4 comprises 251 amino acids and predicts a molecular mass of 28.4 kDa. The apparent molecular mass of the recombinant protein is approximately 36-41 kDa in SDS-PAGE under reducing conditions due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

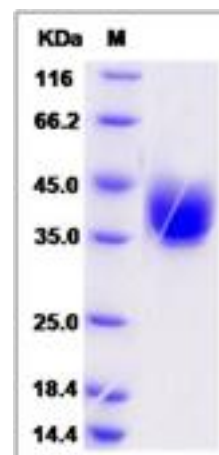
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

ADP-ribosyltransferase 4 (Dombrock blood group), also known as Mono-ADP-ribosyltransferase 4(ART4), Dombrock blood group carrier molecule and CD297, is a protein that contains a mono-ADP-ribosylation (ART) motif. It is a member of the ADP-ribosyltransferase gene family but enzymatic activity has not been demonstrated experimentally. ADP-ribosyltransferase catalyzes the ADP-ribosylation of arginine residues in proteins. Mono-ADP-ribosylation is a posttranslational modification of proteins that is interfered with by a variety of bacterial toxins including cholera, pertussis, and heat-labile enterotoxins of *E. coli*. ART4 could be detected on HEL cells and erythrocytes by FACS analysis while it was absent from activated monocytes, despite the presence of ART4 mRNA in these cells. ART is also known as the carrier of the Dombrock blood group alloantigens (Do) which is glycosylphosphatidylinositol-anchored to the erythrocyte membrane.

References

- 1.Parusel I, et al. (2005) A panel of monoclonal antibodies recognizing GPI-anchored ADP-ribosyltransferase ART4, the carrier of the Dombrock blood group antigens. *Cell Immunol.* 236(1-2): 59-65.
- 2.Friedrich M, et al. (2005) Analysis of the 3' UTR of the ART3 and ART4 gene by 3' inverse RACE-PCR. *DNA Seq.* 16(1): 53-7.
- 3.Okazaki IJ, et al. (1998) Glycosylphosphatidylinositol-anchored and secretory isoforms of mono-ADP-ribosyltransferases. *J Biol Chem.* 273(37): 23617-20.