

Human ANT XR1 Protein (Fc Tag)

Catalog Number: 13367-H02H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

ATR; GAPO; TEM8; 2310008J16Rik; 2810405N18Rik; Antrx1; Tem8

Protein Construction:

A DNA sequence encoding the human ANT XR1 (Q9H6X2-4) (Met1-Ser321) was expressed, fused with the Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE

Endotoxin:

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

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Glu 33

Molecular Mass:

The recombinant human ANT XR1 /Fc is a disulfide-linked homodimer. The reduced monomer comprises 530 amino acids and has a predicted molecular mass of 59.4 kDa. The apparent molecular mass of the protein is approximately 69 kDa in SDS-PAGE under reducing conditions.

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

Storage:

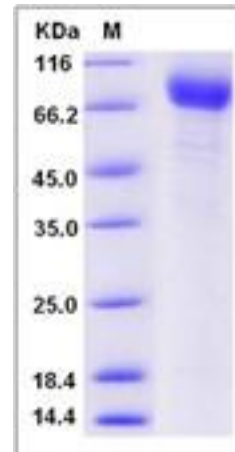
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

ANT XR1 contains 1 VWFA domain and belongs to the ATR family. ATR (Ataxia telangiectasia and Rad3 related) and ATM (Ataxia telangiectasia mutated) are closely related kinases that are activated by DNA damage. They are serine-threonine protein kinases and belongs to the phosphatidylinositol 3' kinase-like kinase (PIKK) family. Upon recruitment by the DNA damage binding proteins/complexes (ATRIP for ATR; MRN for ATM), ATM/ATR initiate the DNA damage checkpoint by phosphorylating a number of key proteins. ANT XR1 interacts with extracellular matrix proteins and with the actin cytoskeleton. It functions in cell attachment and migration. ANT XR1 also mediates adhesion of cells to type 1 collagen and gelatin, reorganization of the actin cytoskeleton and promotes cell spreading. It plays a role in the angiogenic response of cultured umbilical vein endothelial cells.

References

1. Chaudhary A, *et al.* (2012) TEM8/ANT XR1 blockade inhibits pathological angiogenesis and potentiates tumoricidal responses against multiple cancer types. *Cancer Cell*. 21 (2): 212-26.
2. Garlick KM, *et al.* (2012) Binding of filamentous actin to anthrax toxin receptor 1 decreases its association with protective antigen. *Biochemistry*. 51 (6): 1249-56.
3. St Croix B, *et al.* (2000) Genes expressed in human tumor endothelium. *Science*. 289 (5482): 1197-202.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>