Rat B7-H3 / CD276 Protein (Fc Tag)

Catalog Number: **80380-R02H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

4Ig-B7-H3; B7-H3; B7H3; B7RP-2; 6030411F23Rik; AU016588; B7h3; B7RP-2

Protein Construction:

A DNA sequence encoding the rat CD276 (Q7TPB4) (Met1-Phe244) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Rat

Expression Host: Human Cells

QC Testing

Purity: > 85 % 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 ℃

Predicted N terminal: Val 29

Molecular Mass:

The recombinant rat CD276/Fc is a disulfide-linked homodimer. The reduced monomer comprises 457 amino acids and has a predicted molecular mass of 50.6 kDa. The apparent molecular mass of the protein is approximately 61 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

Storage:

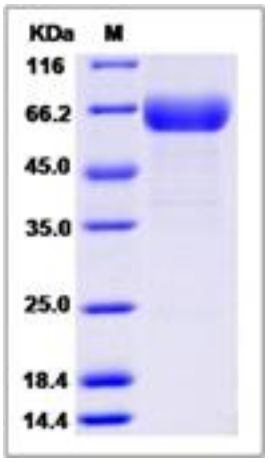
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

B7-H3 is a member of the B7 family of immune regulatory ligands that is thought to attenuate peripheral immune responses through co-inhibition. It plays an important role in adaptive immune responses, and was shown to either promote or inhibit T-cell responses in various experimental systems. B7-H3 may play an important role in muscle-immune interactions, providing further evidence of the active role of muscle cells in local immunoregulatory processes. B7-H3 is a novel protein structurally related to the B7 family of ligands by the presence of a single set of immunoglobulin-V-like and immunoglobulin-C-like (VC) domains. Previous studies have correlated its overexpression with poor prognosis and decreased tumor-infiltrating lymphocytes in various carcinomas including uterine endometrioid carcinomas, and mounting evidence supports an immuno-inhibitory role in ovarian cancer prognosis. Recently, B7-H3 expression has been reported in several human cancers indicating an additional function of B7-H3 as a regulator of antitumor immunity.

References

1.Suh WK, *et al.* (2004) The immune regulatory protein B7-H3 promotes osteoblast differentiation and bone mineralization. Proc Natl Acad Sci U S A. 101(35): 12969-73.
2.Waschbisch A, *et al.* (2008) Human muscle cells express the costimulatory molecule B7-H3, which modulates muscle-immune interactions. Arthritis Rheum. 58(11): 3600-8.
3.Loos M, *et al.* (2010) B7-h3 and its role in antitumor immunity. Clin Dev Immunol. 2010: 683875.