Cynomolgus B7-H3 / CD276 Protein (ECD, His Tag)

Catalog Number: 90806-C08H

General Information

Gene Name Synonym:

CD276

Protein Construction:

A DNA sequence encoding the cynomolgus CD276 (XP_005560056.1) (Met1-Glu465) was expressed with a polyhistidine tag at the C-terminus.

Source: Cynomolgus

Expression Host: HEK293 Cells

QC Testing

Purity: ≥ 95 % as determined by SDS-PAGE. ≥ 90 % as determined by SEC-HPLC.

Bio Activity:

Immobilized Anti-B7-H3 Antibody, IgG1 Kappa at 2 μg/mL (100 μL/well) can bind Recombinant Cynomolgus B7-H3 / CD276 Protein (ECD, His Tag) (Cat: 90806-C08H), the EC50 is 2.7-9 ng/mL

Endotoxin:

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

Predicted N terminal: Leu 29

Molecular Mass:

The recombinant cynomolgus CD276 consists of 448 amino acids and predicts a molecular mass of 48.5 kDa. As a result of glycosylation, it migrates as an approximately 68.3 kDa band 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

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

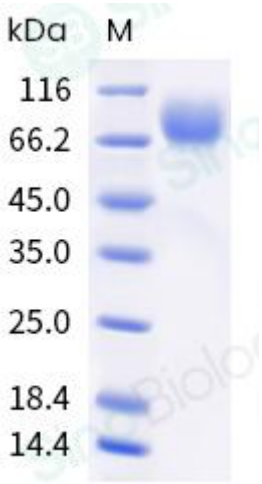
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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.