

# Human CD276 / B7-H3 Protein (His Tag), Biotinylated

Catalog Number: 11188-H08H-B



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

4Ig-B7-H3; B7-H3; B7H3; B7RP-2

### Protein Construction:

A DNA sequence encoding the human CD276 (Q5ZPR3-1) extracellular domain (Met1-Thr461) was expressed, with a polyhistidine tag at the C-terminus. The purified protein was biotinylated in vitro.

**Source:** Human

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 97 % as determined by SDS-PAGE

### Endotoxin:

< 1.0 EU per µg 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:** Leu 29

### Molecular Mass:

The recombinant human CD276 consists of 444 amino acids and predicts a molecular mass of 48 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rhCD276 is approximately 73 kDa due to glycosylation.

### Formulation:

Lyophilized from a 0.2µm filtered solution of PBS, pH 7.4, 5% trehalose, 5% mannitol.

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:

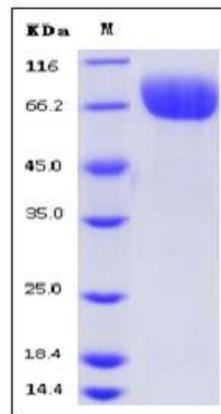
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

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.

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