

Synonym

B7-H3,CD276,B7 homolog 3

Source

Biotinylated Human B7-H3 Protein, Avitag, His Tag(B73-H82E6) is expressed from human 293 cells (HEK293). It contains AA Leu 29 - Pro 245 (Accession # Q5ZPR3-2).

Predicted N-terminus: Leu 29

Molecular Characterization

B7-H3(Leu 29 - Pro 245) Q5ZPR3-2



This protein carries an Avi tag (AvitagTM) at the C-terminus, followed by a polyhistidine tag.

The protein has a calculated MW of 26.5 kDa. The protein migrates as 35-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using AvitagTM technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from $0.22~\mu m$ filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

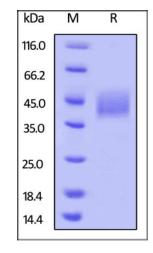
For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human B7-H3 Protein, Avitag, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

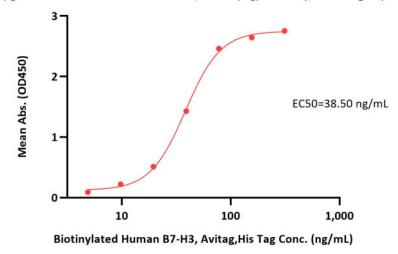
Bioactivity-ELISA





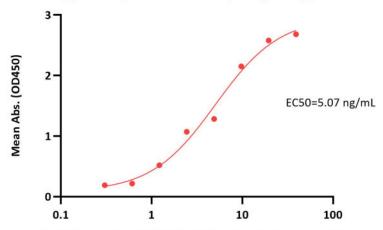
Biotinylated Human B7-H3, Avitag,His Tag ELISA

0.2 μg of Monoclonal Anti-Human B7-H3 / B7-H3 (4lg) Antibody, Human IgG1 per well



Immobilized Monoclonal Anti-Human B7-H3 / B7-H3 (4Ig) Antibody, Human IgG1 at 2 μ g/mL (100 μ L/well) can bind Biotinylated Human B7-H3 Protein, Avitag,His Tag (Cat. No. B73-H82E6) with a linear range of 5-39 ng/mL (QC tested).

Biotinylated Human B7-H3, Avitag,His Tag ELISA 0.1 μg of Biotinylated Human B7-H3, Avitag,His Tag per well



Monoclonal Anti-Human B7-H3 / B7-H3 (4lg) Antibody, Human IgG1 Conc. (ng/mL)

Immobilized Biotinylated Human B7-H3 Protein, Avitag,His Tag (Cat. No. B73-H82E6) at 1 μ g/mL (100 μ L/well) on streptavidin precoated (0.5 μ g/well) plate, can bind Monoclonal Anti-Human B7-H3 / B7-H3 (4Ig) Antibody, Human IgG1 with a linear range of 0.3-10 ng/mL (Routinely tested).

Background

B7 homolog 3 (B7-H3), a member of the immunoglobulin superfamily, is also known CD276, which contains two Ig-like C2-type (immunoglobulin-like) domains and two Ig-like V-type (immunoglobulin-like) domains. B7-H3 may participate in the regulation of T-cell-mediated immune response. B7-H3 also plays a protective role in tumor cells by inhibiting natural-killer mediated cell lysis as well as a role of marker for detection of neuroblastoma cells. Furthermore, B7-H3 is involved in the development of acute and chronic transplant rejection and in the regulation of lymphocytic activity at mucosal surfaces. It could also play a key role in providing the placenta and fetus with a suitable immunological environment throughout pregnancy.

Clinical and Translational Updates

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

