



## Synonym

B7-H3,CD276,B7 homolog 3

## Source

Human B7-H3 Protein, His Tag(B73-H52E2) 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 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 25.2 kDa. The protein migrates as 35-45 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than 1.0 EU per µg by the LAL method.

## Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

## Formulation

Lyophilized from 0.22 µm 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

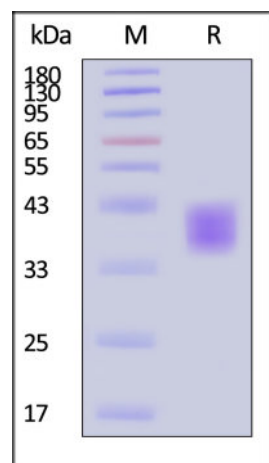
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- -20°C to -70°C for 24 months in lyophilized state;
- -70°C for 24 months under sterile conditions after reconstitution.

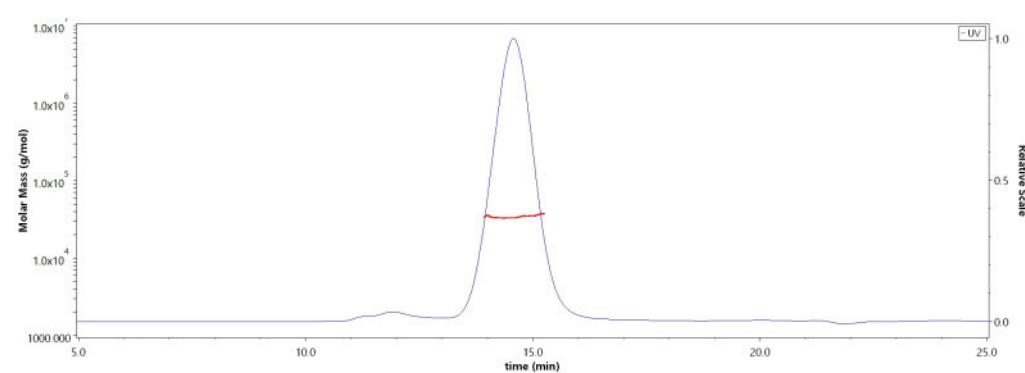
## SDS-PAGE



Human B7-H3 Protein, 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% (With [Star Ribbon Pre-stained Protein Marker](#)).

## Bioactivity-ELISA

## SEC-MALS

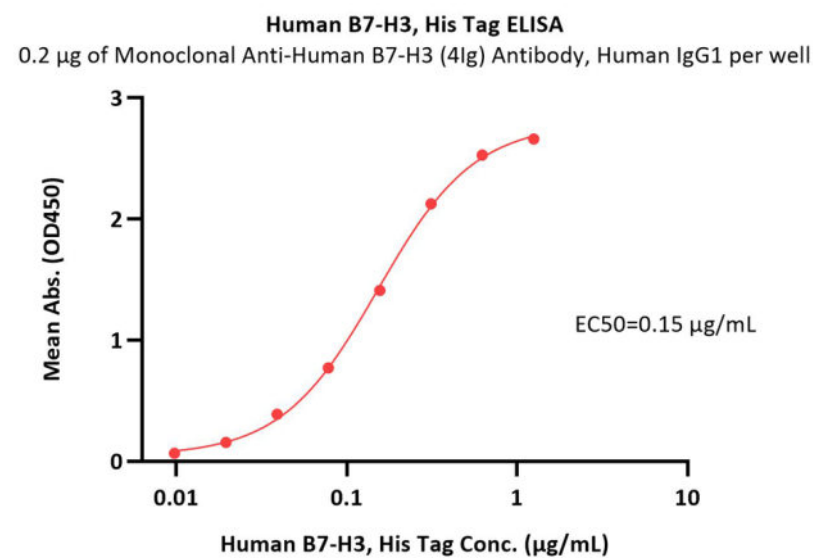
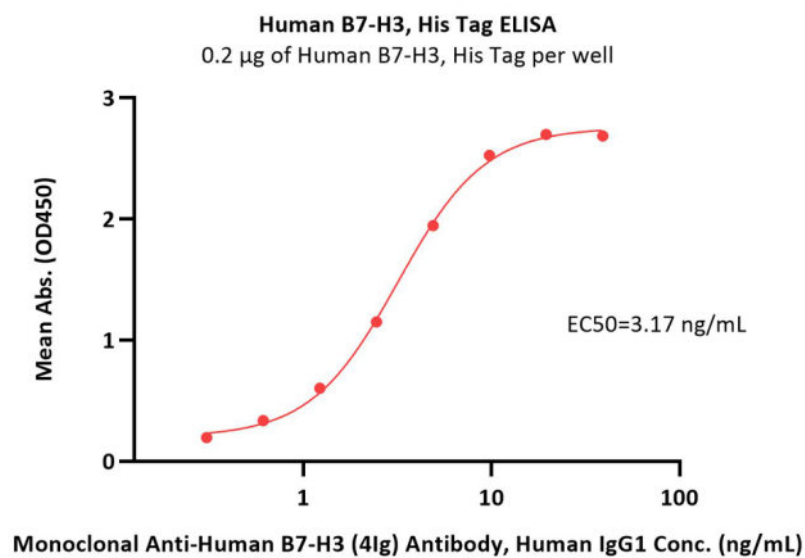


The purity of Human B7-H3 Protein, His Tag (Cat. No. B73-H52E2) is more than 90% and the molecular weight of this protein is around 30-40 kDa verified by SEC-MALS.

[Report](#)

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and more!

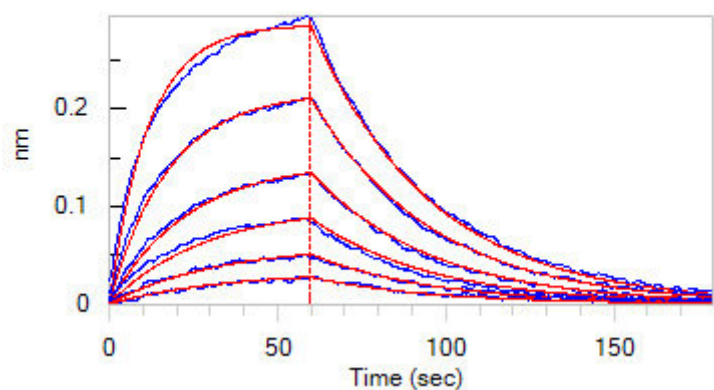




Immobilized Human B7-H3, His Tag (Cat. No. B73-H52E2) at 2 µg/mL (100 µL/well) can bind Monoclonal Anti-Human B7-H3 / B7-H3 (4Ig) Antibody, Human IgG1 with a linear range of 0.3-5 ng/mL (QC tested).

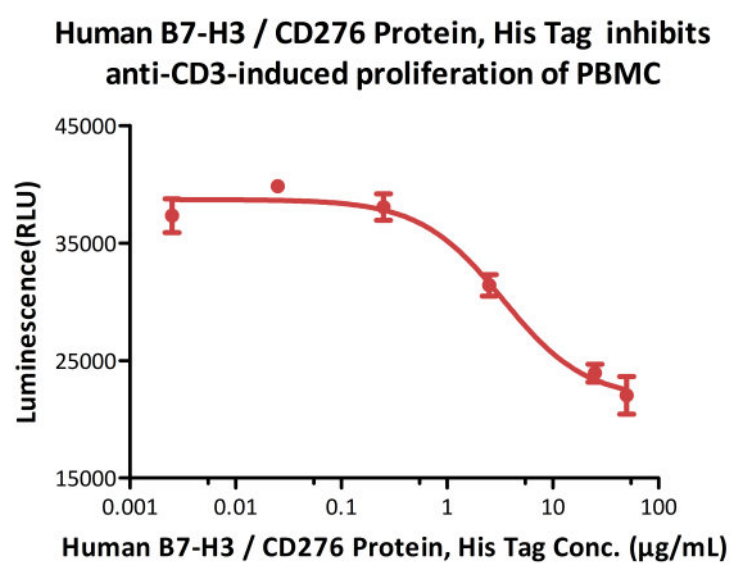
Immobilized Monoclonal Anti-Human B7-H3 / B7-H3 (4Ig) Antibody, Human IgG1 at 2 µg/mL (100 µL/well) can bind Human B7-H3, His Tag (Cat. No. B73-H52E2) with a linear range of 0.01-0.156 µg/mL (Routinely tested).

### Bioactivity-BLI



Loaded Monoclonal Anti-Human B7-H3 / B7-H3 (4Ig) Antibody, Human IgG1 on Protein A Biosensor, can bind Human B7-H3 Protein, His Tag (Cat. No. B73-H52E2) with an affinity constant of 479 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

### Bioactivity-Bioactivity CELL BASE



Human B7-H3, His Tag (Cat. No. B73-H52E2) inhibits Anti-CD3-induced proliferation of PBMC. The EC50 for this effect is 2.24-3.36 µg/mL (Routinely tested).

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## 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

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