

# **Synonym**

4Ig-B7-H3, B7-H3, CD276, PSEC0249, UNQ309, PRO352, B7 homolog 3

### Source

Human B7-H3 (4Ig), His Tag(B7B-H52E7) is expressed from human 293 cells (HEK293). It contains AA Gly 27 - Thr 461 (Accession # Q5ZPR3-1). Predicted N-terminus: Gly 27

### **Molecular Characterization**

B7-H3 (4lg)(Gly 27 - Thr 461) Q5ZPR3-1

Poly-his

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

The protein has a calculated MW of 48.5 kDa. The protein migrates as 65-80 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

### **Endotoxin**

Less than 1.0 EU per µg by the LAL method / rFC 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**

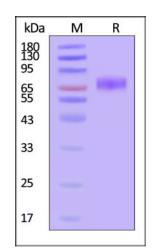
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

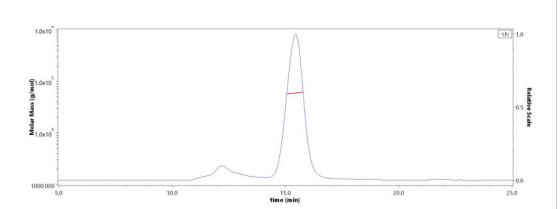
# **SDS-PAGE**



Human B7-H3 (4Ig), 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**

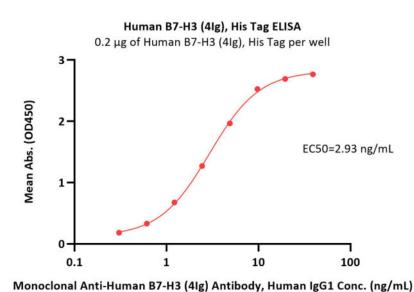
# SEC-MALS



The purity of Human B7-H3 (4Ig), His Tag (Cat. No. B7B-H52E7) is more than 85% and the molecular weight of this protein is around 55-70 kDa verified by SEC-MALS.

Report



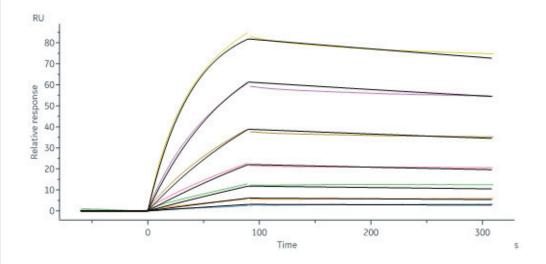


Immobilized Human B7-H3 (4Ig), His Tag (Cat. No. B7B-H52E7) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Monoclonal Anti-Human B7-H3 / B7-H3 (4Ig) Antibody, Human IgG1 with a linear range of 0.3-5 ng/mL (QC tested).

# Human B7-H3 (4lg), His Tag ELISA 0.2 μg of Monoclonal Anti-Human B7-H3 (4lg) Antibody, Human IgG1 per well 2 EC50=7.71 ng/mL 10 Human B7-H3 (4lg), His Tag Conc. (ng/mL)

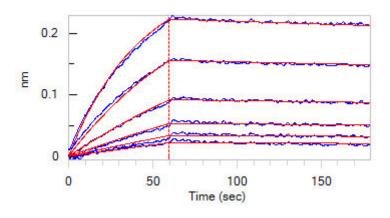
Immobilized Monoclonal Anti-Human B7-H3 / B7-H3 (4Ig) Antibody, Human IgG1 at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human B7-H3 (4Ig), His Tag (Cat. No. B7B-H52E7) with a linear range of 1-10 ng/mL (Routinely tested).

# **Bioactivity-SPR**



Monoclonal Anti-Human B7-H3 / B7-H3 (4Ig) Antibody, Human IgG1 captured on Protein A Chip can bind Human B7-H3 (4Ig), His Tag (Cat. No. B7B-H52E7) with an affinity constant of 4.41 nM as determined in SPR assay (Biacore 8K) (Routinely tested).

# **Bioactivity-BLI**



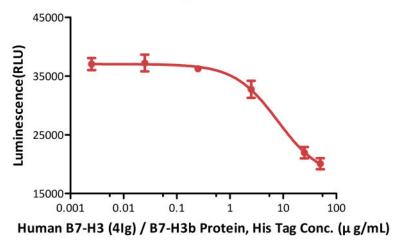
Loaded Monoclonal Anti-Human B7-H3 / B7-H3 (4Ig) Antibody, Human IgG1 on Protein A Biosensor, can bind Human B7-H3 (4Ig), His Tag (Cat. No. B7B-H52E7) with an affinity constant of 1.74 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).





### **Bioactivity-CELL BASE**

Human B7-H3 (4lg) / B7-H3b Protein, His Tag inhibits anti-CD3-induced proliferation of PBMC



Human B7-H3 (4Ig), His Tag (Cat. No. B7B-H52E7) inhibits Anti-CD3-induced proliferation of PBMC. The EC50 for this effect is  $7.95~\mu g/mL$  (Routinely tested).

# **Background**

Human B7 homolog 3 (B7-H3) is a member of the B7 family of immune proteins that provide signals for the regulation of immune responses. Other family members include B7-1, B7-2, B7-H1/PD-L1, B7-H2, and PD-L2. B7 family proteins are type I transmembrane immunoglobulin (Ig) superfamily members that contain extracellular Ig V-like and Ig C-like domains with a short cytoplasmic tail. Termed 4IgB7-H3 or B7-H3b, this molecule has two additional Ig-like domains (one V-type and one C-type) and shows a ubiquituous expression pattern.

