## FITC-Labeled Human B7-H3 (4lg) / B7-H3b Protein, His Tag (MALS verified)

Catalog # B7B-HF2E7



## **Synonym**

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

#### **Source**

FITC-Labeled Human B7-H3 (4Ig), His Tag (B7B-HF2E7) is expressed from human 293 cells (HEK293). It contains AA Gly 27 - Thr 461 (Accession # Q5ZPR3-1). It is the FITC labeled form of Human B7-H3 (4Ig), His Tag (Cat. No.B7B-H52E7).

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 60-70 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

### Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.

### **Protein Ratio**

The FITC to protein molar ratio is 1-2.

# Endotoxin

Less than 1.0 EU per  $\mu g$  by the LAL method.

## **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **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.

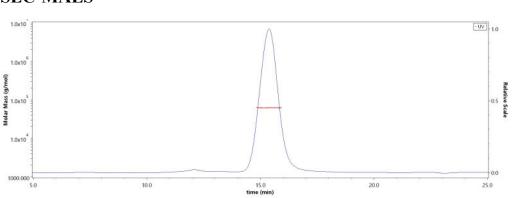
Please protect from light and avoid repeated freeze-thaw cycles.

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**

## SEC-MALS

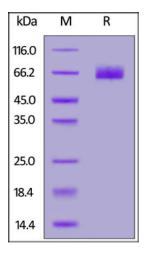




# FITC-Labeled Human B7-H3 (4lg) / B7-H3b Protein, His Tag (MALS verified)





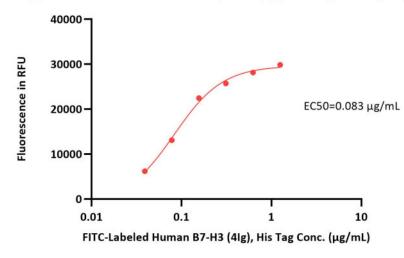


FITC-Labeled Human B7-H3 (4Ig), His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

# **Bioactivity-ELISA**

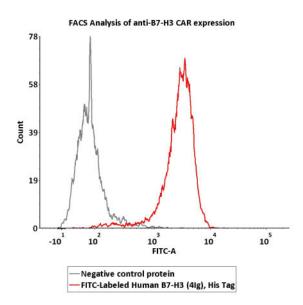
### FITC-Labeled Human B7-H3 (4lg), His Tag ELISA

 $0.2~\mu g$  of Monoclonal Anti-Human B7-H3 / B7-H3 (4lg) Antibody, Human IgG1 per well

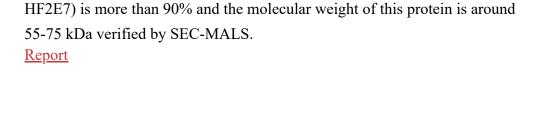


Immobilized Monoclonal Anti-Human B7-H3 / B7-H3 (4Ig) Antibody, Human IgG1 at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind FITC-Labeled Human B7-H3 (4Ig), His Tag (Cat. No. B7B-HF2E7) with a linear range of 0.039-0.156  $\mu$ g/mL (QC tested).

## **Bioactivity-FACS**



2e5 of anti-B7-H3 CAR-293 cells were stained with 100  $\mu L$  of 3  $\mu g/mL$  of FITC-Labeled Human B7-H3 (4Ig) , His Tag (Cat. No. B7B-HF2E7) and



The purity of FITC-Labeled Human B7-H3 (4Ig), His Tag (Cat. No. B7B-



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negative control protein respectively, FITC signals was used to evaluate the binding activity (QC 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.

**Clinical and Translational Updates** 

