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 (4Ig)(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 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.

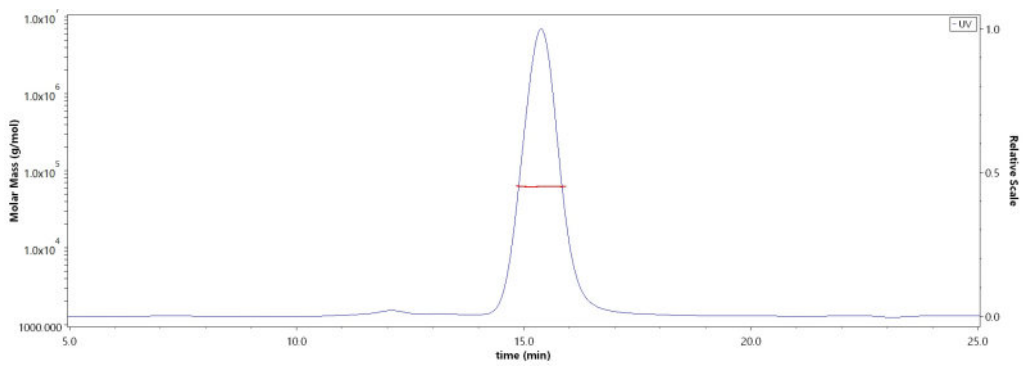
Please protect from light and avoid repeated freeze-thaw cycles.

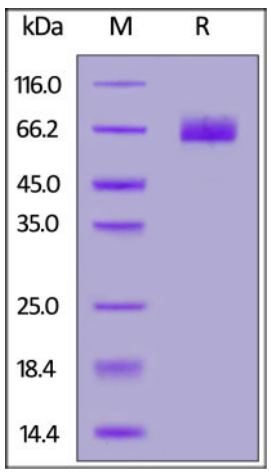
This product is stable after storage at:

- -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

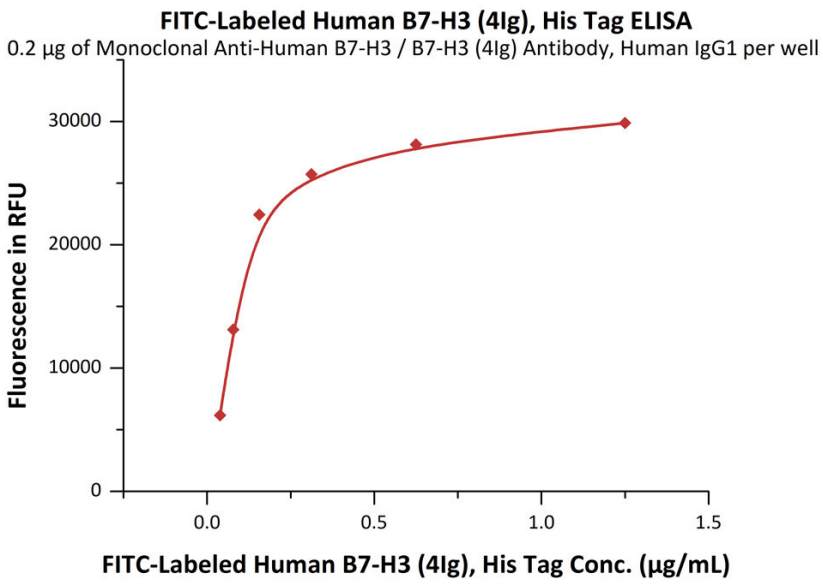




FITC-Labeled Human B7-H3 (4Ig), His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

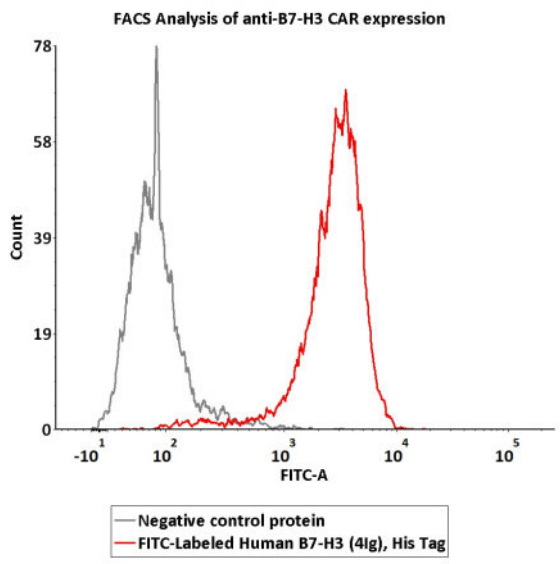
The purity of FITC-Labeled Human B7-H3 (4Ig), His Tag (Cat. No. B7B-HF2E7) is more than 90% and the molecular weight of this protein is around 55-75 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



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

Bioactivity-FACS



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

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