

Synonym

B7-H4,VTCN1,B7S1,B7h.5

Source

Human B7-H4, His Tag(B74-H5222) is expressed from human 293 cells (HEK293). It contains AA Phe 29 - Ala 258 (Accession # NP_078902). Predicted N-terminus: Phe 29

Molecular Characterization

B7-H4(Phe 29 - Ala 258) NP_078902

Poly-his

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

The protein has a calculated MW of 26.4 kDa. The protein migrates as 39-55 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 EU per μg by the LAL method / rFC method.

Sterility

Negative

Purity

>90% 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

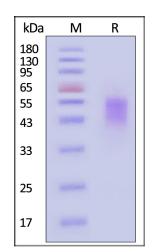
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

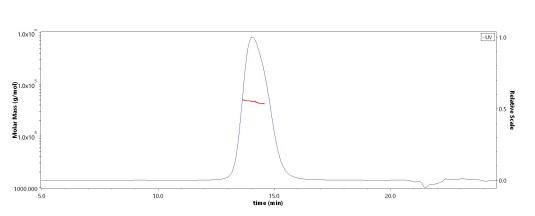
SDS-PAGE



Human B7-H4, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA

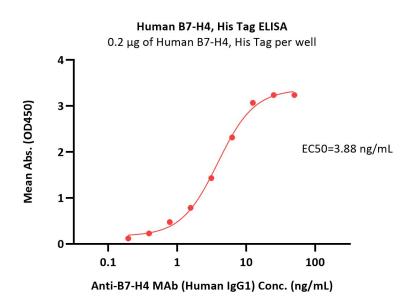




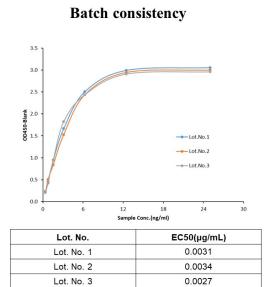
The purity of Human B7-H4, His Tag (Cat. No. B74-H5222) is more than 90% and the molecular weight of this protein is around 35-53 kDa verified by SEC-MALS.

Report





Immobilized Human B7-H4, His Tag (Cat. No. B74-H5222) at 2 μ g/mL (100 μ L/well) can bind Anti-B7-H4 MAb (Human IgG1) with a linear range of 0.2-6 ng/mL (QC tested).



Background

V-set domain-containing T-cell activation inhibitor 1 (VTCN1) is also known as Immune costimulatory protein B7-H4, Protein B7S1, T-cell costimulatory molecule B7x, B7H4, which belongs to the immunoglobulin superfamily and BTN/MOG family. VTCN1 contains two Ig-like V-type (immunoglobulin-like) domains. The expression of VTCN1 is up-regulated by IL6 and IL10 and is inhibited by GM-CSF and IL4 on antigen-presenting cells (APCs). VTCN1 / B7-H4 negatively regulates T-cell-mediated immune response by inhibiting T-cell activation, proliferation, cytokine production and development of cytotoxicity. VTCN1 involved in promoting epithelial cell transformation.

