

Recombinant Human B7-H4/VTCN1 Protein (Fc Tag)

Catalog No. PKSH031453

Note: Centrifuge before opening to ensure complete recovery of vial contents.

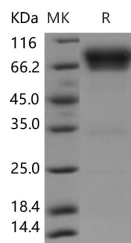
Description

Synonyms	B7S1;B7x;Vtcn1;B7h.5;B7-H4;B7H4T-cell costimulatory molecule B7x;B7S1VCTN1;B7XPRO1291;FLJ22418;Immune costimulatory protein B7-H4;Protein B7S1;T cell costimulatory molecule B7x;V-set domain containing T cell activation inhibitor 1;V-set domain-containing T-cell activation inhibitor 1
Species	Human
Expression Host	HEK293 Cells
Sequence	Phe29-Ala258
Accession	Q7Z7D3-1
Calculated Molecular Weight	52.3 kDa
Observed molecular weight	66-76 kDa
Tag	C-hFc
Bioactivity	Measured by its ability to inhibit anti-CD3 antibody and anti-CD28 antibody induced IFN γ secretion in human T lymphocytes. The ED50 for this effect is typically 0.7-3. 5 μ g/ml.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μ g of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

For Research Use Only

Background

V-set domain-containing T-cell activation inhibitor 1, also known as B7X, B7H4, B7S1, and VTCN1, is a single-pass type I membrane protein belonging to the B7 family of costimulatory proteins. These proteins are expressed on the surface of antigen-presenting cells and interact with ligands on T lymphocytes. They provide costimulatory signals that regulate T cell responses. A soluble form of B7H4 has also been detected. B7X / VTCN1 / B7H4 negatively regulates T-cell-mediated immune response by inhibiting T-cell activation, proliferation, cytokine production and development of cytotoxicity. When expressed on the cell surface of tumor macrophages, B7X / VTCN1 / B7H4 plays an important role, together with regulatory T-cells (Treg), in the suppression of tumor-associated antigen-specific T-cell immunity. B7X / VTCN1 / B7H4 is also involved in promoting epithelial cell transformation. This membrane protein can be up-regulated by IL6 / interleukin-6 and IL10 / interleukin-10 and inhibited by CSF2 / GM-CSF and IL4 / interleukin-4 on antigen-presenting cells.

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