

Recombinant Human B7-H4/VTCN1 Protein (aa 29-258, His Tag)

Catalog No. PDMH100005

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

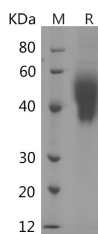
Description

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
Calculated Molecular Weight	26.8 kDa
Observed molecular weight	43-48 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg 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	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis

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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