

B7-H4 Active Protein | VTCN1 active protein

B7-H4 Protein, Human, Recombinant (ECD, hFc Tag)

CATALOG #
AAA257923

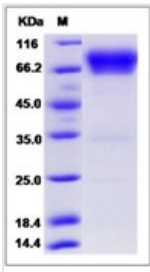
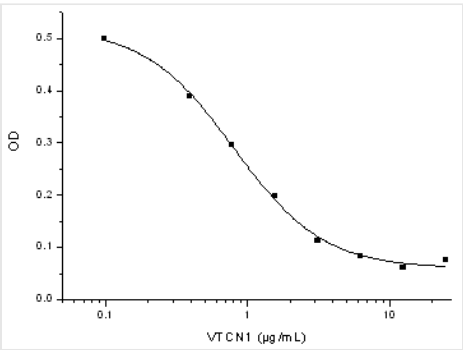
HOST
HEK293 Cells

PRODUCT SYNONYMS

B7-H4; B7-H4 Protein; Human; Recombinant (ECD; hFc Tag); Human B7-H4/B7S1/B7x Protein (ECD; Fc Tag); B7h.5 Protein; B7H4 Protein; B7S1 Protein; B7X Protein; PRO1291 Protein; VCTN1 Protein; V-set domain containing T cell activation inhibitor 1; VTCN1 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>95% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Phe29-Ala258
Species	Human
Activity	Measured by its ability to inhibit IL-2 secretion in human T lymphocytes induced by anti-CD3 antibody and anti-CD28 antibody. The ED50 for this effect is 0.7-3.5ug/mL.
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Phe 29
Tag	C-human IgG1-Fc
Protein Construction	A DNA sequence encoding the human VTCN1 (Q7Z7D3-1)(Phe29-Ala258) was expressed, fused with the Fc region of human IgG1 at the C-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



SDS-PAGE

Application Data
Measured by its ability to inhibit IL-2 secretion in human T lymphocytes induced by anti-CD3 antibody and anti-CD28 antibody. The ED50 for this effect is 0.7-3.5 µg/mL.

ADDITIONAL INFORMATION

Related Product Information for VTCN1 active protein	Background: V-set domain-containing T-cell activation inhibitor 1, also known as B7X, B7H4, B7S1, and VTCN1, is a single-pass type-III 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.
Product Categories/Family for VTCN1 active protein	Cancer Drug Targets
References	Zang X, et al. (2003) B7x: a widely expressed B7 family member that inhibits T cell activation. Proc Natl Acad Sci U S A. 100(18): 10388-92.Suh WK, et al. (2006) Generation and characterization of B7-H4/B7S1/B7x-deficient mice. Mol Cell Biol. 26(17): 6403-11.Zang X, et al. (2007) B7-H3 and B7x are highly expressed in human prostate cancer and associated with disease spread and poor outcome. Proc Natl Acad Sci U S A. 104(49):19458-63.

NCBI AND UNIPROT INFORMATION

NCBI GI #	70997756
NCBI GeneID	79679
UniProt Accession #	Q7Z7D3; Q0GN76; Q45VN0; Q5WPZ3; Q6P097; Q9H6B2
Molecular Weight	30,878 Da
NCBI Official Full Name	B7-H4
NCBI Official Synonym Full Names	V-set domain containing T cell activation inhibitor 1
NCBI Official Symbol	VTCN1
NCBI Official Synonym Symbols	B7X; B7H4; B7S1; B7-H4; B7h.5; VCTN1; PRO1291; RP11-229A19.4
NCBI Protein Information	V-set domain-containing T-cell activation inhibitor 1; B7 family member, H4; B7 superfamily member 1; T cell costimulatory molecule B7x; T-cell costimulatory molecule B7x; immune costimulatory protein B7-H4
UniProt Protein Name	V-set domain-containing T-cell activation inhibitor 1
UniProt Gene Name	VTCN1
UniProt Synonym Gene Names	B7H4

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/hek293-vtn1-active-protein/b7-h4/257923>