

# Human B7-H4 / VTCN1 / B7S1 Protein (Fc Tag)



Sino Biological  
Biological Solution Specialist

Catalog Number: 10738-H05H

## General Information

### Gene Name Synonym:

B7-H4; B7h.5; B7H4; B7S1; B7X; PRO1291; VCTN1

### Protein Construction:

A DNA sequence encoding the human VTCN1 (NP\_078902.2) (Phe29-Ala258) was expressed with the Fc region of mouse IgG1 at the C-terminus.

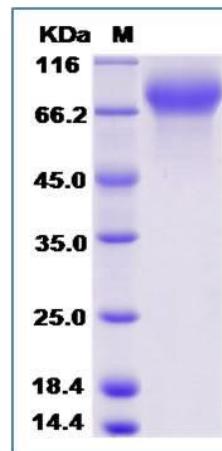
**Source:** Human

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE.

### SDS-PAGE:



## Protein Description

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.

## References

- 1.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.
- 2.Suh WK, et al. (2006) Generation and characterization of B7-H4/B7S1/B7x-deficient mice. Mol Cell Biol. 26(17): 6403-11.
- 3.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.

## Usage Guide

### Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

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**For US Customer:** Fax: 267-657-0217

● Tel: 215-583-7898

**Global Customer:** Fax :+86-10-5862-8288

● Tel:+86-400-890-9989 ● <http://www.sinobiological.com>