

Active Recombinant Human VTCN1 Protein (Phe29-Ala258), HIgG1 Fc-tagged, Biotinylated

Cat. No. VTCN1-430H **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Recombinant Human VTCN1 Protein (Q7Z7D3-1) (Phe29-Ala258) was produced by HEK293 Cells expression system. This protein was expressed with the Fc region of human IgG1 at the C-terminus. The purified protein was biotinylated in vitro.

Species

Human

Source

HEK293

ProteinLength

Phe29-Ala258

Description

V-set domain-containing T-cell activation inhibitor 1, also known as B7X, B7H4, B7S1, and VTCN1, is a single-pass type? 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 IL1 / interleukin-1 and inhibited by CSF2 / GM-CSF and IL4 / interleukin-4 on antigen-presenting cells.

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Predicted N Terminal	Phe 29
Form	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Bio-activity	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.
Molecular Mass	The recombinant human VTCN1 consists of 471 amino acids and predicts a molecular mass of 52.3 kDa.
Endotoxin	< 1.0 EU per μ g protein as determined by the LAL method.
Purity	> 95 % as determined by SDS-PAGE.
Stability	Samples are stable for up to twelve months from date of receipt at -70 centigrade.
Storage	Store it under sterile conditions at -20 centigrade to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 mg/ml. Centrifuge the vial at 4°C before opening to recover the entire contents.
Shipping	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 unless customers require otherwise.

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Conjugation Biotin

GENE INFORMATION

Gene Name VTCN1 V-set domain containing T cell activation inhibitor 1 [Homo sapiens]

Official Symbol VTCN1

Synonyms VTCN1; B7 H4; B7H4; B7S1; B7X; FLJ22418; B7-H4; B7h.5; VCTN1; PRO1291; RP11-229A19.4;

Gene ID 79679

mRNA Refseq NM_001253849

Protein Refseq NP_001240778

MIM 608162

UniProt ID Q7Z7D3

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