Human B7-H4 / B7S1 / B7x Protein (Fc Tag), Biotinylated

Catalog Number: 10738-H02H-B

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

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

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. The purified protein was biotinylated in vitro.

Source: Human

Expression Host: Human Cells

QC Testing

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

Endotoxin:

< 1.0 EU per μg protein as determined by the LAL method.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Phe 29

Molecular Mass:

The recombinant human VTCN1 consists of 471 amino acids and predicts a molecular mass of 52.3 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

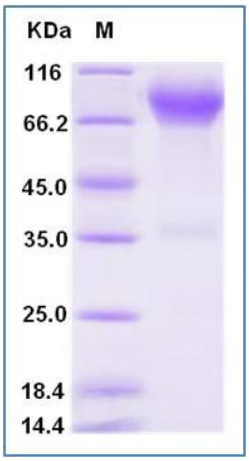
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

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? 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.

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