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

Catalog Number: **10738-H02H**

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Biological Solution Specialist

General Information

Gene Name Synonym:

VTCN1, B7H4

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.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the 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/Fc is a disulfide-linked homodimer. The reduced monomer comprises 471 amino acids and has a predicted molecular mass of 52.3 kDa. The apparent molecular mass of the protein is approximately 66-76 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

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

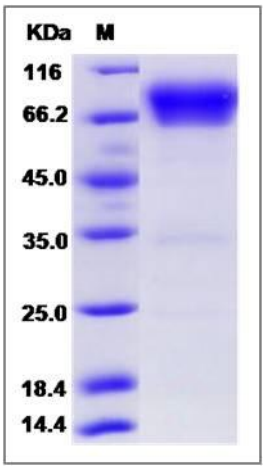
Usage Guide

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.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

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, Proc Natl Acad Sci. 100 (18): 10388-92.
2. Suh WK. et al., 2006, Mol Cell Biol. 26 (17): 6403-11.
3. Zang X. et al., 2007, Proc Natl Acad Sci. 104 (49): 19458-63.