# ABclonal®

# **Recombinant Human B7-H4/VTCN1 Protein**

Catalog No.: RP00218 Recombinant

# **Sequence Information**

**Species Gene ID Swiss Prot** HEK293 cells 79679 Q7Z7D3

Tags

C-His

**Synonyms** 

VTCN1;B7-H4;B7H4;B7S1;B7X;B7h.5;PRO1291;VCT N1

#### **Product Information**

Source Purification

HEK293 cells ≥ 95 % as determined by

SDS-PAGE.

#### **Endotoxin**

 $< 0.1 \; \text{EU/}\mu\text{g}$  of the protein by LAL method.

### **Formulation**

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

#### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

#### Contact

www.abclonal.com

# **Background**

B7 homolog 4 (B7-H4, VTCN1) is a member of the B7 family of cell surface ligands that regulate T cell activation and immune responses.B7-H4 is expressed on the surface of activated lymphocytes, macrophages, monocytes, dendritic cells, epithelial cells, and bone marrow-derived mesenchymal stem cells. Its binding to activated T cells dampens T cell responses and induces cell cycle arrest in the T cell.The B7-H4 protein is also found in ovarian cancer , breast cancer, renal cell carcinoma, and rheumatoid arthritis patients.Research studies indicate that B7-H4 protein is present on the surface of ovarian tumor cells, and that targeted inhibition of B7-H4 using recombinant antibodies restores T cell activation pathways. These studies suggest some potential therapeutic value in blocking B7-H4 function and restoring T cell function in cancer patients.

#### **Basic Information**

#### Description

Recombinant Human B7-H4/VTCN1 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Phe29-Ala258) of human B7-H4/B7S1/B7x (Accession #NP\_078902.2) fused with a 6×His tag at the C-terminus.

#### **Bio-Activity**

Measured by its binding ability in a functional ELISA.Immobilized Mouse B7-H4/VTCN1/VISTA (Catalog: RP00218) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind B7-H4/VTCN1 Rabbit pAb with a linear range of 0.2-22 ng/mL.

#### Storage

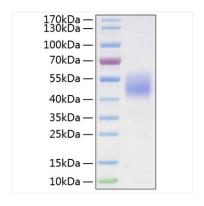
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at  $-20^{\circ}$ C for 3 months, at  $2-8^{\circ}$ C for up to 1 week.

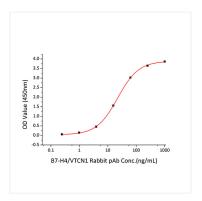
Avoid repeated freeze/thaw cycles.

<sup>\*</sup> For your safety and health, please wear a lab coat and disposable gloves when handling.

## **Validation Data**



Recombinant Human B7-H4/VTCN1 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



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