

# Recombinant Human B7-H4/VTCN1 Protein

Catalog No.: RP00218 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Human	79679	Q7Z7D3

### Tags

C-His

### Synonyms

VTCN1;B7-H4;B7H4;B7S1;B7X;B7h.5;PRO1291;VCTN1

## Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE.

Calculated MW	Observed MW
26.16 kDa	45-60 kDa

### Endotoxin

&lt; 0.1 EU/μg 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 stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact

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## 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 μg/mL (100 μL/well) can bind B7-H4/VTCN1 Rabbit pAb with a linear range of 0.2-22 ng/mL.

### Storage

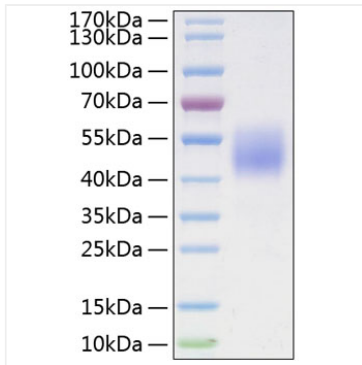
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

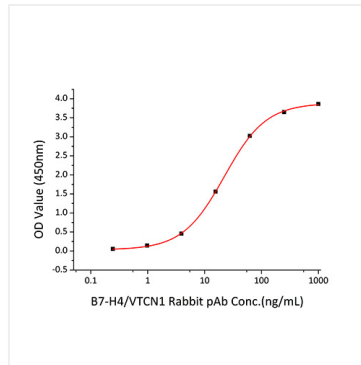
Avoid repeated freeze/thaw cycles.

## Validation Data

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Recombinant Human B7-H4/VTCN1 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 45-60 kDa.



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