



# Recombinant Protein Technical Manual

**Recombinant Human B7-H4/VTCN1 Protein (mFc Tag)**  
RPES4365

## Product Data:

**Product SKU:** RPES4365

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** Q7Z7D3

## Protein Information:

**Molecular Mass:** 51.9 kDa

**AP Molecular Mass:** 6605 kDa

**Tag:** C-mFc

**Bio-activity:**

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

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** B7S1; B7x; Vtcn1; B7h.5; B7-H4; B7H4T-cell costimulatory molecule B7x; B7S1VCTN1; B7XPRO1291; FLJ22418; Immune costimulatory protein B7-H4; Protein B7S1; T cell costimulatory molecule B7x; V-set domain containing T cell activation inhibitor 1; V-set domain-containing T-cell activation inhibitor 1

## Immunogen Information:

**Sequence:** Phe29-Ala258

## Background:

B7 Homolog 4 (B7-H4) is glycosylated member of the B7 family of immune costimulatory proteins. Mature human B7-H4 consists of a 235 amino acid (aa) extracellular domain (ECD) with two Ig-like V-type domains, a 21 aa transmembrane segment, and a 2 aa cytoplasmic tail. It is widely expressed, including in kidney, liver, lung, pancreas, placenta, prostate, spleen, testis and thymus. B7-H4 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, plays an important role, together with regulatory T-cells (Treg), in the suppression of tumor-associated antigen-specific T-cell immunity. It also involved in promoting epithelial cell transformation.