

# Recombinant Mouse VTCN1 Protein

**For Research Use Only**

## 1. Basic Product Information

Catalog No.: REP51707

Size: 10ug, 100ug

Protein Name: V-set domain containing T-cell activation inhibitor 1 (B7 homolog 4) (B7-H4) (Immune costimulatory protein B7-H4) (Protein B7S1) (T cell costimulatory molecule B7x)

Synonym: Vtcn1, B7h4

UniProt ID: Q7TSP5

UniProt Link: [www.uniprot.org/uniprotkb/Q7TSP5/entry](http://www.uniprot.org/uniprotkb/Q7TSP5/entry)

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 283 AA

Molecular Weight: 31 KD

Protein Tag: C-terminal His6

## 2. Amino Acid Sequence

MASLGQII FWSIINIIILAGAI ALIIGFGISGKH FITVTTFTSAGNIGEDGTL SCTFEPDIKLN GIVIQWLKEGI  
KGLVHEFKEGKDDL SQQHEMFRGRTAVFADQVV VGNASRLK NVQLTDAGTYTCYIRTSKGKGNA  
NLEYKTGA FMSPEINVDYNASSELRCEAPRWFPQPTVAWASQVDQGANFSEVSNTSFELNSENVT  
MKVVS VLYNVTINNTYSCMIENDIAKATGDIKVT DSEVKRRSQLQLLNSGPSPCVFSSAFVAGWALLS  
LSCCLMLR

## 3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

## 4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

## 5. Product Description

This product is recombinant V-set domain containing T-cell activation inhibitor 1 (B7 homolog 4) (B7-H4) (Immune costimulatory protein B7-H4) (Protein B7S1) (T cell costimulatory molecule B7x) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

**Protein Function:** 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. Involved in promoting epithelial cell transformation.

**Subcellular Localization:** Cell membrane ; Lipid-anchor, GPI-anchor . Note=Expressed at the cell surface. A soluble form has also been detected.

## 6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.