Recombinant Human B7-H4/VTCN1 Protein (aa 29-258, His Tag)

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Catalog Number: PDMH100356



Description Species Human Mol Mass 26.8 kDa Accession O7Z7D3 Not validated for activity **Bio-activity Properties** >95% as determined by reducing SDS-PAGE. Purity < 1.0 EU/mg of the protein as determined by the LAL method Endotoxin Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 Storage °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at $< -20^{\circ}$ C for 3 months. This product is provided as lyophilized powder which is shipped with ice packs. Shipping Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Formulation Mannitol. Reconstitution It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis. Data

| KDa | Μ | R |
|-----|---|---|
| 80 | - | |
| 60 | - | |
| 40 | ٠ | 1 |
| 30 | - | |
| 20 | ۳ | |
| 12 | - | |

> 95 % as determined by reducing SDS-PAGE.

Background

V-set domain-containing T-cell activation inhibitor 1, also known as B7X, B7H4, B7S1, and VTCN1, is a single-pass type-III 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-cellmediated 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 antigenpresenting cells.

For Research Use Only