

Recombinant Human BTN3A1/CD277 protein (His Tag)

Catalog Number: PDMH100143

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

Description

Species	Human
Source	HEK293 Cells-derived Human BTN3A1/CD277 protein Met1-Gly254, with an C-terminal His
Calculated MW	27.8 kDa
Observed MW	30 kDa
Accession	O00481
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°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 in PBS with 5% Trehalose and 5% 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.

Background

Butyrophilin Subfamily 3 Member A1 (BTN3A1/CD277) is a type I transmembrane glycoprotein member of the Ig superfamily. It is expressed on a wide variety of immune cells. Similar to BTN3A2 and BTN3A3, BTN3A1 is composed of an extracellular N-terminal IgV and a membraneproximal IgC domain followed by a transmembrane domain and a cytoplasmic tail. These Ig domains are also found in B7 family costimulatory molecules, suggesting structural and functional similarities between the two protein families. BTN3A1 acts as a critical protein for the activation of Vγ9Vδ2 T cells following detection of distressed cells. The anti-tumor responses of Vγ9Vδ2 T cells may be enhanced with agonistic anti-BTN3A1 antibodies.