Human BTN3A1 / CD277 Protein, His Tag, active dimer (MALS verified)

Catalog # BT1-H52H4

Synonym

BTN3A1,CD277,BTF5

Source

Human BTN3A1 Protein, His Tag(BT1-H52H4) is expressed from human 293 cells (HEK293). It contains AA Gln 30 - Gly 254 (Accession # O00481-1). Predicted N-terminus: Gln 30

Molecular Characterization

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 29.5 kDa. The protein migrates as 32-35 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

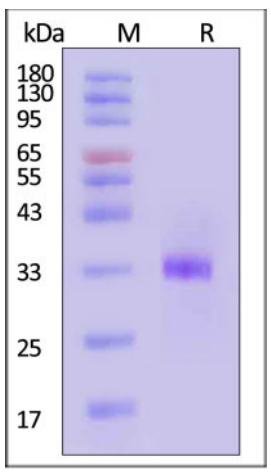
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

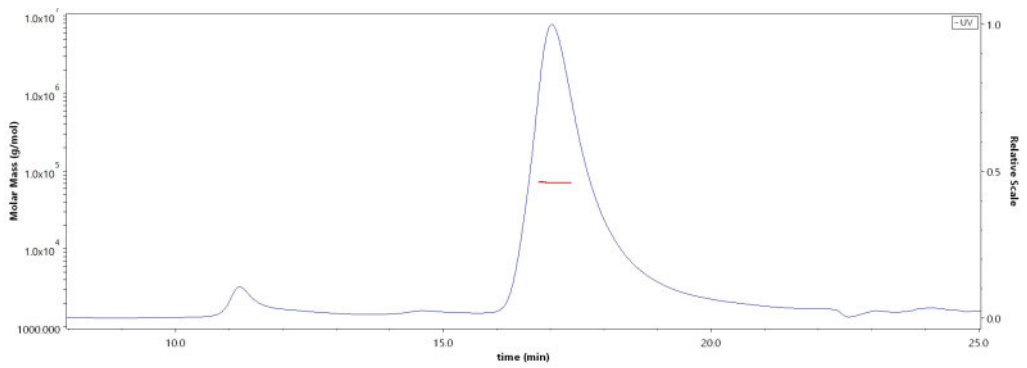
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



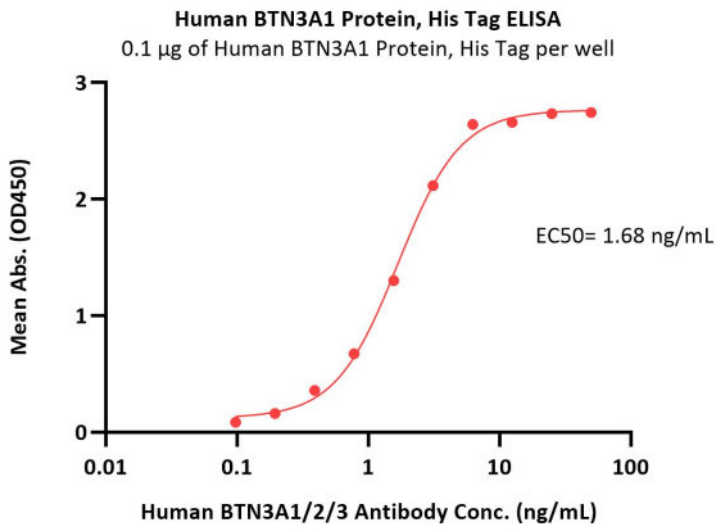
Human BTN3A1 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Human BTN3A1 Protein, His Tag (Cat. No. BT1-H52H4) is more than 85% and the molecular weight of this protein is around 65-80 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Human BTN3A1 Protein, His Tag (Cat. No. BT1-H52H4) at 1 μg/mL (100 μL/well) can bind Human BTN3A1/2/3 Antibody with a linear range of 0.1-3 ng/mL (QC tested).

Background

Butyrophilin subfamily 3 member A1 (BTN3A1) is also known as CD277 and BTF5, which belongs to the immunoglobulin superfamily and contains one B30.2/SPRY domain and two Ig-like V-type (immunoglobulin-like) domains. BTN3A1 plays a role in T-cell activation and in the adaptive immune response. Also, BTN3A1 regulates the proliferation of activated T-cells and the release of cytokines and IFNG by activated T-cells. Furthermore, BTN3A1 mediates the response of T-cells toward infected and transformed cells that are characterized by high levels of phosphorylated metabolites, such as isopentenyl pyrophosphate.

Clinical and Translational Updates