

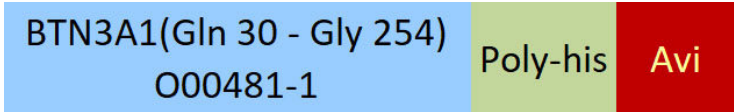
Synonym

BTN3A1,CD277,BTF5

Source

Biotinylated Human BTN3A1 Protein, His,Avitag(BT1-H82E4) 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, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 27.7 kDa. The protein migrates as 32-33 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% 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.

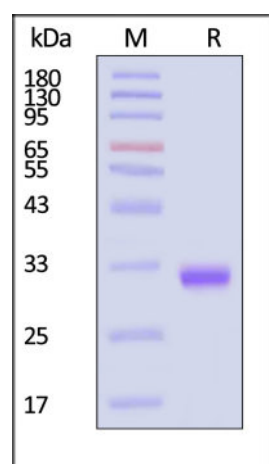
Storage

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

Please avoid repeated freeze-thaw cycles.

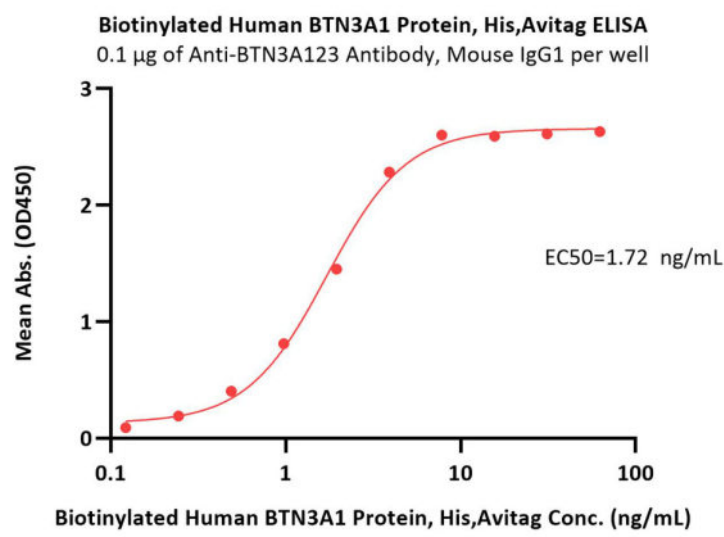
This product is stable after storage at:

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

SDS-PAGE

Biotinylated Human BTN3A1 Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

Bioactivity-ELISA



Immobilized Anti-BTN3A123 Antibody, Mouse IgG1 at 1 µg/mL (100 µL/well) can bind Biotinylated Human BTN3A1 Protein, His,Avitag (Cat. No. BT1-H82E4) with a linear range of 0.1-4 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

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.