

Synonym

BTN3A1,CD277,BTF5

Source

Biotinylated Human BTN3A1, Fc,Avitag (BT1-H82F7) is expressed from human 293 cells (HEK293). It contains AA Gln 30 - Gly 254 (Accession # [O00481-1](#)).

Predicted N-terminus: Gln 30

Molecular Characterization

BTN3A1(Gln 30 - Gly 254) O00481-1	Fc(Pro 100 - Lys 330) P01857	Avi
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This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 52.93 kDa. The protein migrates as 55-65 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Biotinylation

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

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 Tris with Glycine, Arginine and NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization.

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.

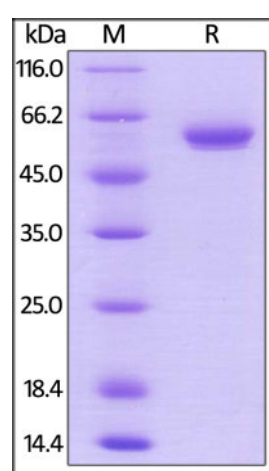
Storage

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, Fc,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

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.