

## **Synonym**

BTN3A1,CD277,BTF5

#### Source

Human BTN3A1, Fc Tag(BT1-H5255) is expressed from human 293 cells (HEK293). It contains AA Gln 30 - Gly 254 (Accession # 000481-1). Predicted N-terminus: Gln 30

## **Molecular Characterization**

BTN3A1(Gln 30 - Gly 254) Fc(Pro 100 - Lys 330)
O00481-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 50.8 kDa. The protein migrates as 58-65 kDa under reducing (R) condition, and 120 kDa under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

## **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from 0.22 µm filtered solution in

Tris with Glycine, Arginine and NaCl, pH7.5 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

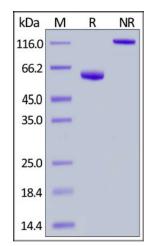
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

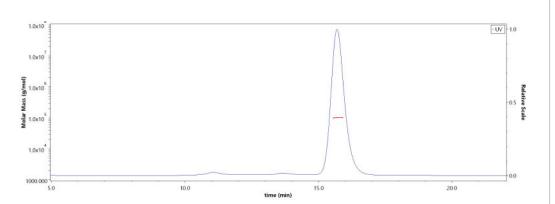
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Human BTN3A1, Fc Tag on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## **SEC-MALS**



The purity of Human BTN3A1, Fc Tag (Cat. No. BT1-H5255) is more than 90% and the molecular weight of this protein is around 95-115 kDa verified by SEC-MALS.

<u>Report</u>

## 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,



# Human BTN3A1 / CD277 Protein, Fc Tag (MALS verified)

Catalog # BT1-H5255



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** 

