

For Research Use Only

# Recombinant Human BTN3A1 protein (His Tag)



Catalog Number: Eg1915

## Basic Information

**Species:**  
Human

**Purity:**  
>90 %, SDS-PAGE

**Tag:**  
His Tag

## Technical Specifications

**Purity:**

>90 %, SDS-PAGE

**Endotoxin Level:**

<0.1 EU/  $\mu$ g protein, LAL method

**Source:**

HEK293-derived Human BTN3A1 protein Gln30-Gly254 (Accession# O00481-1) with a his tag at the C-terminus.

**GeneID:**

11119

**Accession:**

O00481-1

**Predicted Molecular Mass:**

25.2 kDa

**SDS-PAGE:**

27-30 kDa, reducing (R) conditions

**Formulation:**

Lyophilized from 0.22  $\mu$ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

## Biological Activity

Not tested

## Storage and Shipping

**Storage:**

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

**Shipping:**

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

## Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

## Background

BTN3A1, also named as Butyrophilin subfamily 3 member A1, BTF5 or CD277, is a 513 amino acid protein, which contains one B30.2/SPRY domain and two Ig-like V-type (immunoglobulin-like) domains. BTN3A1 is involved in immunomodulation and binds to various receptors such as the  $\gamma$   $\delta$  T cell receptor ( $\gamma$   $\delta$  TCR) and small molecules, fulfilling a wide range of functions including immunomodulation, (PMID: 35371078; 32820120). BTN3A1 is also involved in the process of antigen presentation, influencing the recognition and response of immune cells to infections and tumors (PMID: 37989744).

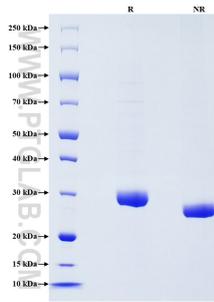
## References

1. Herrmann T. et al. (2022). Front Immunol. 13:876493.
2. Payne KK. et al. (2020). Science. 369(6506):942-949.
3. Hu Y. et al. (2023). Signal Transduct Target Ther. 8(1):434.

## Synonyms

BT3.1, BTF5, CD277

## Selected Validation Data



Purity of Recombinant Human BTN3A1 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.

For technical support and original validation data for this product please contact

T: 027-87531629

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

W: [ptgcn.com](http://ptgcn.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.