

Synonym

BTN1A1,Butyrophilin,BTN

Source

Biotinylated Human BTN1A1, His,Avitag(BT1-H82E6) is expressed from human 293 cells (HEK293). It contains AA Ala 27 - Arg 242 (Accession # [Q13410-1](#)).
Predicted N-terminus: Ala 27

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 27.6 kDa. The protein migrates as 36-40 kDa 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.

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.

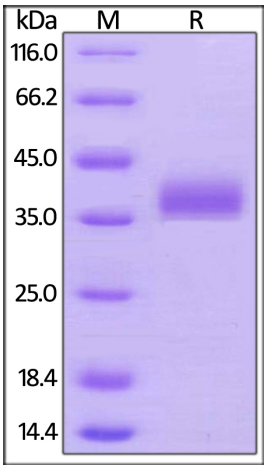
Storage

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



Biotinylated Human BTN1A1, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Background

Butyrophilin subfamily 1 member A1 (BTN1A1) is also known as BTN, which is a member of the immunoglobulin superfamily and the major protein associated with fat droplets in the milk. BTN1A1 may have a cell surface receptor function. The human butyrophilin gene is localized in the major histocompatibility complex (MHC) class I region of 6p and may have arisen relatively recently in evolution by the shuffling of exons between 2 ancestral gene families. Furthermore, BTN1A1



Biotinylated Human BTN1A1 / Butyrophilin Protein, His,Avitag™

Catalog # BT1-H82E6



regulates the amount of lipids and size of droplets expressed in milk and inhibits the proliferation of CD4 and CD8 T-cells activated by anti-CD3 antibodies, T-cell metabolism and IL2 and IFNG secretion.

