

Human BTN2A1&BTN3A1 complex Protein

Cat. No. BTN-HM123

Description

Source	Recombinant Human BTN2A1&BTN3A1 complex Protein is expressed from HEK293 with His tag and Flag tag at the C-terminus. It contains Gln29-Ala248 (BTN2A1) acidic tail and Gln30-Gly254 (BTN3A1) basic tail.
Accession	Q7KYR7-1(BTN2A1)&O00481-1(BTN3A1)
Molecular Weight	The protein has a predicted MW of 30.74 kDa (BTN2A1) and 30.25 kDa (BTN3A1). Due to glycosylation, the protein migrates to 53-63 kDa (BTN2A1) and 33-38 kDa (BTN3A1) based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

Formulation and Storage

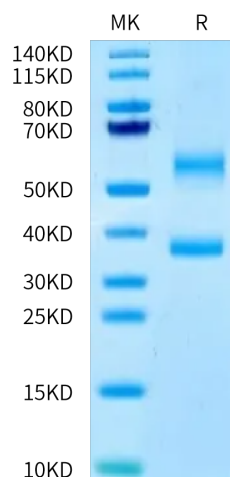
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

BTN2A1 and BTN3A1 clearly play highly distinct roles in Vγ9Vδ2 T cell detection of P-Ag-exposed cells. BTN2A1&BTN3A1, a protein complex which contains heterodimeric BTN2A1 and BTN3A1 extracellular domains (ECD), is critical to enhance cytotoxic killing by Vγ9Vδ2 T cells.

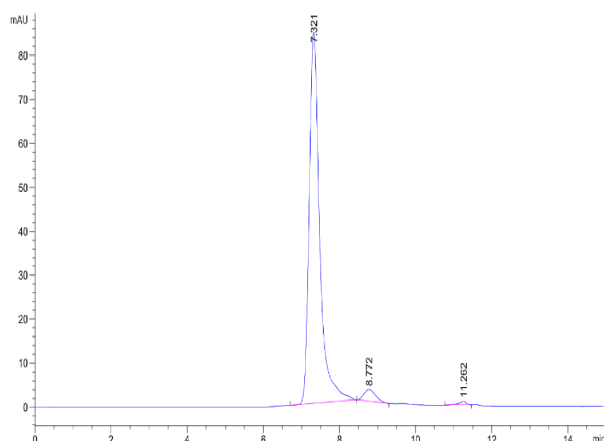
Assay Data

Tris-Bis PAGE



Human BTN2A1&BTN3A1 complex on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



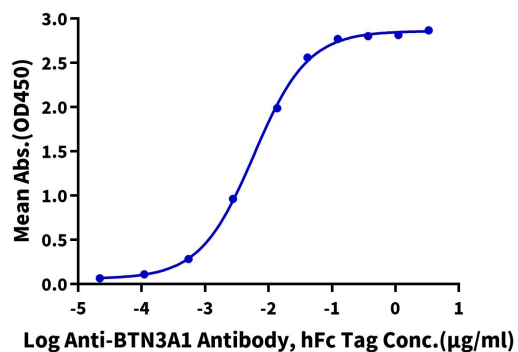
The purity of Human BTN2A1&BTN3A1 complex is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human BTN3A1&BTN2A1, His Tag ELISA

0.05µg Human BTN3A1&BTN2A1, His Tag Per Well



Immobilized Human BTN3A1&BTN2A1, His Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Anti-BTN3A1 Antibody, hFc Tag with the EC50 of 5.9ng/ml determined by ELISA.