Elabscience®

Recombinant Human BTN2A1 Protein (His Tag)

Catalog Number: PKSH033746

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description			
Species	Human		
Source	HEK293 Cells-derived Human BTN2A1 protein Gln29-Ala248, with an C-terminal His		
Calculated MW	25.4 kDa		
Observed MW	39-44 kDa		
Accession	Q7KYR7		
Bio-activity	Not validated for activity		
Properties			
Purity	> 95 % as determined by reducing SDS-PAGE.		
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.		
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80		
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of		
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.		
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.		
Formulation	ion Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.		
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants		
	before lyophilization.		
	Please refer to the specific buffer information in the printed manual.		
Reconstitution	Please refer to the printed manual for detailed information.		

Data

kDa	MK	R
120 90		
60		
40		Annes
30	-	
20	-	
14	-	

> 95 % as determined by reducing SDS-PAGE.

Background

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Butyrophilin 2A1 (BTN2A1) is an approximately widely expressed and variably glycosylated type I transmembrane glycoprotein. Mature human Butyrophilin 2A1 consisits of a 220 amino acid (aa) extracellular domain with two immunoglobulin-like domains, a 21 aa transmembrane segment, and a 258 aa cytoplasmic domain. Alternative splicing generates additional isoforms of human Butyrophilin 2A1 that lack the first Ig like domain or transmembrane segment as well as isoforms with substitutions and deletions in the cytoplasmic region. BTN2A1 is widely expressed including on colonic epithelial cells, on immune cells, and in milk fat globules. It binds to the C-type lectin DCSIGN on monocytederived dendritic cells, and this interaction can be blocked by soluble gp130 from HIV. The polymorphism of BTN2A1 has been associated with metabolic syndrome, type II diabetes mellitus, chronic kidney disease, and hypertension.