

## Recombinant Human Butyrophilin 1A1/BTN1A1 Protein (His Tag)

**Catalog Number:** PKSH032132

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

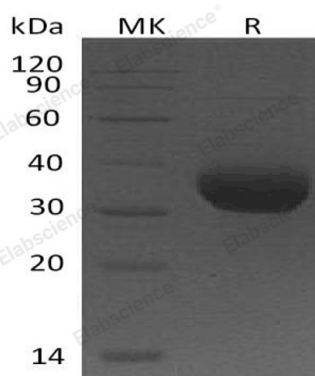
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human BTN1A1 protein Ala27-Arg242, with an C-terminal His
<b>Calculated MW</b>	25.0 kDa
<b>Observed MW</b>	31-37 kDa
<b>Accession</b>	Q13410
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2. 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.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Butyrophilin Subfamily 1 Member A1 (BTN1A1) is the major protein associated with fat droplets in the milk. It belongs to the immunoglobulin superfamily. BTN1A1 acts as a specific membrane-associated receptor for the association of cytoplasmic droplets with the apical plasma membrane. It is localized to the major histocompatibility complex (MHC) class I region of 6p. It may have arisen relatively recently in evolution by the shuffling of exons between 2 ancestral gene families. It is shown that BTN1A1 inhibits the proliferation of CD4 and CD8 T-cells activated by anti-CD3 antibodies, T-cell metabolism and IL2 and IFNG secretion.

### For Research Use Only