

## Recombinant Mouse BTNL2/Butyrophilin-like Protein 2 Protein (His Tag)

Catalog Number: PKSM041354

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

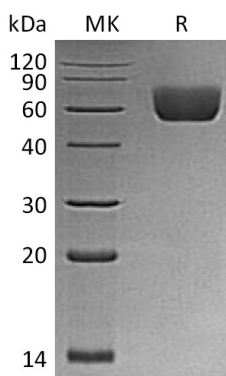
### Description

<b>Species</b>	Mouse
<b>Source</b>	HEK293 Cells-derived Mouse BTNL2/Butyrophilin-like2 protein Asp27-Ser452, with an C-terminal His
<b>Calculated MW</b>	48.6 kDa
<b>Observed MW</b>	55-65 kDa
<b>Accession</b>	O70355
<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 PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
<b>Reconstitution</b>	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

### Data



### Background

Butyrophilin-like 2 (BTNL2) is a member of the BTN/MOG Ig-superfamily and functions as a negative regulator of immune cell activation. Mouse BTNL2 is type I transmembrane glycoprotein that contains an extracellular domain (ECD), a transmembrane region and a short cytoplasmic domain. The ECD features two V-type Ig-like domains, two C-type Ig-like domains, and four glycosylation sites. BTNL2 is expressed in epithelial cells of the small intestine, colonic dendritic cells, and in cells of the lymph node. BTNL2 expression is upregulated in T cells following activation, a characteristic BTNL2 shares with the homologous B7 family of costimulatory molecules. BTNL2 negatively regulates T cells by inhibiting proliferation and inflammatory cytokine secretion. It also increases the expression of FoxP3 in T cells to promote regulatory T cell development. Single nucleotide polymorphisms in BTNL2 are associated with a risk for sporadic prostate cancer, rheumatoid arthritis, sarcoidosis, ulcerative colitis, and other inflammatory diseases.