



Recombinant Protein Technical Manual

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

RPES2071

Product Data:

Product SKU: RPES2071

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: O70355

Protein Information:

Molecular Mass: 48.6 kDa

AP Molecular Mass: 55-65 kDa

Tag: C-His

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Butyrophilin-like protein 2; Btnl2; Gm315; Ng9

Immunogen Information:

Sequence: Asp27-Ser452

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.