



Recombinant Protein Technical Manual

Recombinant Human BTN2A2 Protein (Fc Tag)

RPES4099

Product Data:

Product SKU: RPES4099

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q8WVV5

Protein Information:

Molecular Mass: 49.7 kDa

AP Molecular Mass: 55-65 kDa

Tag: C-Fc

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 subfamily 2 member A2; BTN2A2

Immunogen Information:

Sequence: Gln33-Val237

Background:

Butyrophilin 2A2 (BTN2A2) is a widely expressed type I transmembrane glycoprotein that functions as a negative regulator of immune responses. Mature human Butyrophilin 2A2 consists of a 233 amino acid (aa) extracellular domain with two immunoglobulin-like domains, a 21 aa transmembrane segment, and a 237 aa cytoplasmic domain. Alternative splicing generates additional isoforms of human Butyrophilin 2A2 that lack the first, second, or both Iglike domains as well as isoforms with substitutions and deletions in the cytoplasmic region. Within the immune system, Butyrophilin 2A2 is expressed on thymic epithelial cells, na?ve B cells, splenic NK cells, dendritic cells, and peritoneal macrophages and is up-regulated with cell activation. Butyrophilin 2A2 inhibits T cell proliferation and activation and enhances the development of FoxP3+ regulatory T cells. Its up-regulation in the hippocampus is associated with schizophrenia.