



Recombinant Protein Technical Manual

Recombinant Human BTN2A1 Protein (His Tag)

RPES4123

Product Data:

Product SKU: RPES4123

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q7KYR7

Protein Information:

Molecular Mass: 25.4 kDa

AP Molecular Mass: 39-44 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 subfamily 2 member A1; BTN2A1; BT2.1; BTF1

Immunogen Information:

Sequence: Gln29-Ala248

Background:

Butyrophilin 2A1 (BTN2A1) is an approximately widely expressed and variably glycosylated type I transmembrane glycoprotein. Mature human Butyrophilin 2A1 consists 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.