



Recombinant Protein Technical Manual

**Recombinant Human Butyrophilin 1A1/BTN1A1
Protein (His Tag)**
RPES3672

Product Data:

Product SKU: RPES3672

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q13410

Protein Information:

Molecular Mass: 25.0 kDa

AP Molecular Mass: 33 kDa

Tag: C-6His

Bio-activity:

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

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

Storage: 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.

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

Formulation: Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

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

Application:

Synonyms: Butyrophilin Subfamily 1 Member A1; BT; BTN1A1; BTN

Immunogen Information:

Sequence: Ala27-Arg242

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.