

# Recombinant Human *BTN2A1*

Catalog No: CP88

<b>Description</b>	Recombinant Human Butyrophilin Subfamily 2 Member A1 is produced by our Mammalian expression system and the target gene encoding Gln29-Ala248 is expressed with a 6His tag at the C-terminus.
<b>Source</b>	Human Cells
<b>Alternative name</b>	Butyrophilin subfamily 2 member A1; BTN2A1; BT2.1; BTF1
<b>Accession No.</b>	Q7KYR7
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.
<b>Quality Control</b>	Purity: greater than 95% as determined by reducing SDS-PAGE Endotoxin: Less than 0.1 ng/µg (1 IEU/µg)
<b>Shipping</b>	The product is shipped on dry ice/polar packs. Upon receipt, store it immediately at the temperature listed below.
<b>Storage</b>	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.

**Amino Acid Sequence**

QFIVVGPTDPILATVGENTTLRCHLSPEKNAEDMEVRWFRSQFSPAVFVYKGGRRERTEEQMEEYRG  
RTTFVSKDISRGSVALVIH  
NITAEQNGTYRCYFQEGRSYDEAILHLVVAGLGSKPLISMRGHEDGGIRLECISRGWYPKPLTVWRD  
PYGGVAPALKEVSMPDA  
DGLFMVTTAVIIRDKSVRNMSCSINNTLLGQKKESVIFIPESFMPSVSPCAHHHHHH

**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.

## SDS-PAGE



