

Recombinant Mouse *BTN1A1*/Butyrophilin

Catalog No: CS10

Description	Recombinant Mouse Butyrophilin Subfamily 1 Member A1 is produced by our Mammalian expression system and the target gene encoding Ala27-Trp247 is expressed with a 6His tag at the C-terminus.
Expression System	Human cells
Alternative name	Butyrophilin subfamily 1 member A1; BTN; BTN1A1; butyrophilin; Btn1a1
Accession No.	Q62556
Quality Control	Purity: greater than 95% as determined by reducing SDS-PAGE. Endotoxin: less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
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. Always centrifuge tubes before opening. Do not mix by vortex or pipetting.
Background	Mouse Butyrophilin subfamily 1 member A1(BTN1A1) is a type I transmembrane glycoprotein which is a member of the Ig superfamily. The BTN1A1 ECD displays two predicted IgV and IgC domains as do B7 and Skint proteins which interact with other Ig superfamily members. BTN1A1 binds to xanthine oxidoreductase (XOR). This interaction stabilizes the association of XOR with the milk fat globule membrane and appears to be essential in the control of milk fat globule secretion. In vitro, BTN1A1 inhibits the proliferation of CD4 and CD8 T-cells activated by anti-CD3 antibodies, T-cell metabolism and IL-2 and IFN-γ secretion. Furthermore, in vivo, BTN1A1 has a protective effect against the development of experimental autoimmune encephalomyelitis (EAE). Because butyrophilins are structurally related to B7 proteins and are functionally implicated in immune regulation, they may represent an emerging family of costimulatory/inhibitory molecules.

SDS-PAGE

