

## Product datasheet for **TP727658**

### Btn1a1 Mouse Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant Mouse Butyrophilin Subfamily 1 Member A1/BTN1A1 (C-6His)
Species:	Mouse
Expression cDNA Clone or AA Sequence:	Ala27-Trp247
Tag:	C-His
Buffer:	Lyophilized from a 0.2 um filtered solution of 20mM PB, 150mMNaCl, pH7.4.
Note:	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.
Stability:	12 months from date of despatch
Locus ID:	12231
UniProt ID:	<a href="#">Q62556</a>
Summary:	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- $\hat{\beta}$ 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.



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