

Mouse BTN1A1/Butyrophilin Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF4765

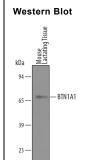
DESCRIPTION		
Species Reactivity	Mouse	
Specificity	Detects mouse BTN1A1/Butyrophilin in direct ELISAs and Western blots. In direct ELISAs, approximately 25% cross-reactivity with recombinant human BTN1A1/Butyrophilin is observed.	
Source	Polyclonal Sheep IgG	
Purification	Antigen Affinity-purified	
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse BTN1A1/Butyrophilin Ala27-Trp247 Accession # Q62556	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.25 μg/mL	See Below

DATA



Detection of Mouse BTN1A1/Butyrophilin by Western Blot. Western blot shows lysates of mouse lactating mammary tissue. PVDF membrane was probed with 0.25 μ g/mL of Sheep Anti-Mouse BTN1A1/Butyrophilin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4765) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016), A specific band was detected for BTN1A1/Butyrophilin at approximately 66 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommends

*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Butyrophilin (Greek for "being like butter"; also Btn1a1) is a 66 kDa member of the BTN/MOG family of proteins. It is expressed on secretory mammary epithelium and associates with xanthine dehydrogenase. This is necessary for milk-lipid droplet secretion. Mature mouse Butyrophilin is 498 amino acids (aa) in length. It is a type I transmembrane glycoprotein that contains a 221 aa extracellular domain (ECD) (aa 27-247) and a 256 aa cytoplasmic region. The ECD contains two V-type Ig-like domains (aa 29-141 and aa 149-235). There are two potential splice variants. One shows a deletion of aa 145-238, while a second shows a 36 aa substitution for aa 144-524. Over aa 27-247, mouse Butyrophilin shares 85% and 67% aa identity with rat and human Butyrophilin, respectively.

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