

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects mouse BTN1A1/Butyrophilin in direct ELISAs and Western blots. In direct ELISAs, approximately 25% cross-reactivity with recombinant human BTN1A1/Butyrophilin is observed.                                                                                          |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant mouse BTN1A1/Butyrophilin<br>Ala27-Trp247<br>Accession # Q62556                                                                                                                                                             |
| <b>Conjugate</b>          | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

#### 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.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

#### 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.

#### PRODUCT SPECIFIC NOTICES

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