

## Product datasheet

### anti-Butyrophilin mouse monoclonal, 102.43, supernatant

#### Short overview

|                 |        |
|-----------------|--------|
| <b>Cat. No.</b> | 651153 |
| <b>Quantity</b> | 5 ml   |

#### Product description

|                      |                                                                                       |
|----------------------|---------------------------------------------------------------------------------------|
| <b>Host</b>          | Mouse                                                                                 |
| <b>Antibody Type</b> | Monoclonal                                                                            |
| <b>Isotype</b>       | IgG2a kappa                                                                           |
| <b>Clone</b>         | 102.43                                                                                |
| <b>Immunogen</b>     | Butyrophilin purified from bovine milk fat globule membrane                           |
| <b>Formulation</b>   | Contains 0.09% sodium azide                                                           |
| <b>UniprotID</b>     | P18892 (Bovine), Q13410 (Human)                                                       |
| <b>Synonym</b>       | Butyrophilin subfamily 1 member A1, BT, BTN1A1, BTN                                   |
| <b>Conjugate</b>     | Unconjugated                                                                          |
| <b>Purification</b>  | Hybridoma cell culture supernatant                                                    |
| <b>Storage</b>       | Short term at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles |
| <b>Intended use</b>  | Research use only                                                                     |
| <b>Application</b>   | IHC, WB                                                                               |
| <b>Reactivity</b>    | Bovine, Human                                                                         |

#### Applications

|                                            |                 |
|--------------------------------------------|-----------------|
| <b>Immunohistochemistry (IHC) - frozen</b> | Ready-to-use    |
| <b>Western Blot (WB)</b>                   | Assay dependent |

#### Background

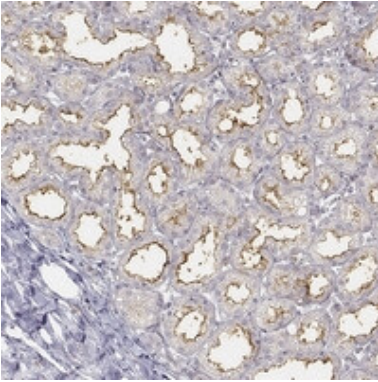
The mab reacts specifically with butyrophilin, a unique 67 kD polypeptide present in lactating mammary gland epithelium and in the milk fat globule membrane (MFGM). No cross-reaction with other MFGM proteins. The epitope has been localized on the N-terminal extracellular part of the protein, close to the transmembrane region. Butyrophilins have recently been described as a new family of immunoregulators, similar to the co-stimulatory and co-inhibitory family of B7 molecules (Arnett & Viney, 2014).

Polypeptide reacting: Butyrophilin, 67 kD polypeptide; present in the apical membrane of lactating mammary epithelium and in MFGM.

Reactivity on cultured cell lines: Transfected cell line BMGE with butyrophilin cDNA.

Positive control: Milk fat globule membrane (MFGM).

## Product images



Butyrophilin staining on human lactating breast (courtesy of The Human Protein Atlas, [www.proteinatlas.org](http://www.proteinatlas.org), Thul PJ et al, 2017. A subcellular map of the human proteome. Science)

## References

| Publication                                                                                                                                                                                                                                | Species | Application |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------|
| <a href="#">Heid, H., Zimbelmann, R., DÄ¶rlinger, Y. &amp; Rickelt, S. Formation and degradation of lipid droplets in human adipocytes and the expression of aldehyde oxidase (AOX). Cell and Tissue Research vol. 379 45â€“62 (2020).</a> | bovine  | WB          |