Product datasheet

anti-Butyrophilin mouse monoclonal, 102.43, supernatant

Short overview

Cat. No.	651153
Quantity	5 ml

Product description

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

Applications

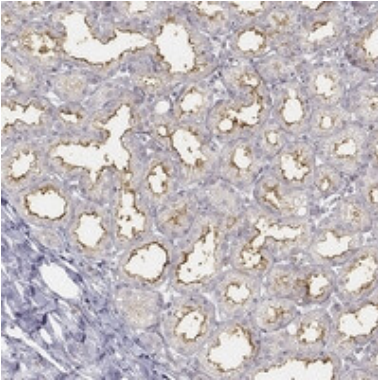|	
Immunohistochemistry (IHC) - frozen	Ready-to-use
Western Blot (WB)	Assay dependent

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).

Arnett HA & Viney JL: Immune modulation by butyrophilins. Nature Review Immunology 14, 559-569 (2014)

Product images

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

References

Publication	Species	Application
Heid, H., Zimbelmann, R., DÃ¶rflinger, Y. & 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).	bovine	WB