MONOCLONAL ANTIBODY TO
BOVINE LACTOFERRICIN B
clone 5F12.1.2

Catalog nr  HM4012 (lot number and expiry date are indicated on the label)
Description Monoclonal antibody clone 5F12.1.2, anti bovine Lactoferricin B is highly specific for bovine Lactoferricin B. This peptide is derived by enzymatic cleavage of lactoferrin which is a member of the transferrin family of metal-binding proteins found in milk and other secretory fluids and also in blood. Cleavage by pepsin of bovine lactoferrin leads to the release of Lactoferricin B (aminoacid 17-41). This peptide is highly basic, possessing five Arg (R) and three Lys (K) residues. In addition, a number of Trp (W) and Phe (F) aromatic residues are present. The two Cys (C) residues from lactoferricin B form a disulfide bond, generating an almost completely cyclical peptide. Nevertheless, the disulfide bond is not required for the antimicrobial potency. Several studies have shown that Lactoferricin B has a broad-spectrum activity against various Gram-positive and Gram-negative bacteria. In addition the peptide has been shown to have antifungal, antiviral and antitumour activity and to bind lipopolysaccharides (LPS, endotoxin). Moreover, it is known to stimulate the adaptive immune response and has anti-inflammatory properties. Lactoferricin B belongs to a large group of cationic antimicrobial peptides.

The monoclonal antibody 5F12.1.2 is specific for bovine Lactoferricin B and detects the QWR antigenic determinant specific for bovine Lactoferricin B (3kDa), it lacks reactivity with bovine lactoferrin C-lobe, human lactoferrin or lactoferricin H. The QWR sequence recognized by the antibody 5F12.1.2 is not present in lactoferrin in human, pig, mouse, goat, rabbit, horse, rat, cockroach and African clawed frog.

Species Mouse IgG1
Formulation 1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS, containing 0.02% sodium azide and 0.1% bovine serum albumin.
Application The monoclonal antibody 5F12.1.2 can be used for Western blotting and as detection in immuno assay.
Use For Western blotting dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:10. Please notice that the antibody detects a band of 3kDa when western blot is used as application. This asks for a special SDS-Page or Tricine protocol.
Storage and stability Product should be stored at 4°C. Under recommended storage conditions, product is stable for one year.
Precautions For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and Federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result with the use of or derivation of this product.
Also available HP7001 Polyclonal antibody against Bovine lactoferrin
HP9033 Polyclonal antibody against Human CRISP-3
HP9034 Polyclonal antibody against Human lactoferrin
HP9035 Polyclonal antibody against Human lysozyme
HM4013 Monoclonal antibody against Bovine lactoferrin C-lobe, clone a-bC-lobe

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