**MONOCLONAL ANTIBODY TO BOVINE LACTOFERRICIN B**
Clone 5F12.1.2

<table>
<thead>
<tr>
<th>Catalog nr</th>
<th>HP7001</th>
<th>Polyclonal antibody against Bovine lactoferrin</th>
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<tr>
<td></td>
<td>HP9033</td>
<td>Polyclonal antibody against Human CRISP-3</td>
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<td></td>
<td>HP9034</td>
<td>Polyclonal antibody against Human lactoferrin</td>
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<td>HP9035</td>
<td>Polyclonal antibody against Human lysozyme</td>
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<td>HM4013</td>
<td>Monoclonal antibody against Bovine lactoferrin C-lobe, clone a-bC-lobe</td>
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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, 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.

**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. Hbt is not responsible for any patent infringements that might result with the use of or derivation of this product.

**References**

All Hbt products are subject to strict quality control procedures

Website: www.hbt.nl

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