CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Lactoferrin C-lobe, Bovine, clone a-bC-lobe		
Catalog number	HM4013		
Lot number	-	**Expiry date**	-
Volume	1 ml	**Amount**	100 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	**Concentration**	100 µg/ml
Host Species	Mouse IgG1	**Conjugate**	None
Endotoxin	N.A.	**Purification**	Protein G
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes						•		•
No								
N.D.	•	•	•	•	•		•	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

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.

- IA: HM4013 can be used as detection in Immuno assay.

General Information

Description

Monoclonal antibody a-bC-lobe, anti-bovine Lactoferrin (Lf) is highly specific for bovine Lactoferrin. This protein is a member of the transferrin family of metal-binding proteins found in milk and other secretory fluids and also in blood. It shows multifunctional properties of which the bacteriostatic and bactericidal effects are the best known. The molecule is constructed with a N-terminal half molecule (N-lobe) and a C-terminal half molecule (C-lobe), each of which is composed of two domains. The biologically important functions have been found mainly in the N-lobe. The lactoferrin determinants responsible for binding to Ca2+-dependent receptor on hepatocytes are present within the C-lobe. The monoclonal antibody a-bC-lobe shows strong reactivities with both native and denatured forms of bovine lactoferrin and C-lobe. The 'WNIPMGL' sequence (467-473 of bovine lactoferrin) is the antigenic determinant or epitopic site of the anti C-lobe antibody a-bC-lobe. The antibody shows weak reactivity with human lactoferrin and korean goat lactoferrin, slight cross reactivity is seen with bovine transferrin, whereas no cross reactivity is seen with human transferrin and chicken ovotransferrin.

Cross reactivity

Human lactoferrin: Weak; Korean goat lactoferrin: Weak; Bovine transferrin: Slight; Human transferrin: No; Chicken ovotransferrin: No

References

1. Shimazaki, K et al; Structural and immunochemical studies on bovine lactoferrin fragments. Adv Exp Med Biol 1998, *443*: 41
2. Nam, S et al; Characterization of Korean native goat lactoferrin. Comp Biochem Physiol part B 1999, *123*: 201
3. Nam, S et al; Fine structures of epitopic sites in human and bovine lactoferrin recognized by anti-bovine lactoferrin C-lobe monoclonal antibody. Food and Agricultural Immunology 2002, *14*: 139

Storage&stability

Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least 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 from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC	Date
Robbert Zwinkels	16/03/2018

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.