

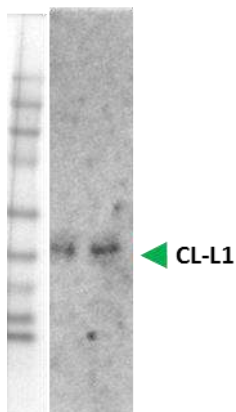
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Collectin-10, Human, clone 4F9D7	Expiry date	-
Catalog number	HM2356-20UG	Amount	20 µg
Lot number	-	Concentration	100 µg/ml
Volume	200 µl	Conjugate	None
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	Purification	Protein G
Host Species	Mouse IgG1		
Endotoxin	N.A.		
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



W: Western blot experiment with human serum and heparin plasma. Antibody 4F9D7 was used with a concentration of 2 µg/ml and the band size found is ~37kDa.

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 1:50.

- IA: Antibody 4F9D7 can be used as a capture antibody.
- W: Reduced SDS-Page. Expected band sizes are ~37 kDa and 75 kDa.

General Information

Description

Antibody 4F9D7 recognizes human Collectin-10 (CL-L1). The complement system is the first line of defense against pathogens and important component of innate as well as adaptive immunity. It consists of three major pathways, the classical, alternative and lectin pathway. Each pathway is activated in a different way. The lectin pathway recognizes foreign carbohydrate structures via MBL, ficolins and collectins. CL-L1, CL-K1 (collectin kidney 1 / Collectin11) and CL-P1 (collectin placenta 1/ Collectin12) are the most recently discovered ones. CL-L1 and CL-K1 are quite homolog and have a classical collectin structure and they are highly conserved in mammals. Both CL-L1 and CL-K1 can bind to carbohydrate ligands and DNA of pathogens or on the membrane of damaged cells. They interact with MASPs and activate in a similar way to MBL and ficolins the lectin pathway. Native CL-L1 displays a calcium dependent binding pattern. A conformational change in carbohydrate recognition domain (CRD) is indicated when the calcium ion is removed by chelation with EDTA. Collectins share a common multimeric structure leading to varying degrees of oligomerization. The chains consist of a collagen-like region, an alpha helicon neck domain and a CRD. CL-L1 was originally found in hepatocytes but mRNA is also found in placenta, adrenal glands lung, small intestine and prostate.

Initially it was thought to exist only as a cytoplasmic protein. Recent studies show that it is also present in the circulation, either separately or in a heteromeric complex with CL-K1. The average serum concentration is depending on the study, localisation and health status of the population. It is considered to be approximately 300ng/ml for healthy individuals. CL-L1 is encoded by a gene called COLEC10 on chromosome 8. A few polymorphisms have been identified which can lead to an increase (up to 40%) of the CL-L1 serum concentration. In SLE patients CL-L1 levels are decreased by approximately 20%. High levels of CL-L1 are beneficial at the time of kidney transplantation and are associated with increased long-term overall mortality. Elevated levels have also been found in the early phase of acute liver failure and in cirrhosis. Due to (short) periods of microbial challenge, fluctuations in CL-L1 in healthy individuals are seen in a given period. In plasma, higher levels of CL-L1 are found than in serum (ca 30%).

Aliases	Collectin liver protein 1, CL-L1, Collectin-34, CL-34
Gene	Gene name: COLEC10, CLL1
Cross reactivity	CL-K1: No.
References	1. Ingles, C et al; The pattern recognition molecule collectin-L1 in critically ill children. <i>Pediatr Res</i> 2016, <i>80</i> :237
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
Brenda Teunissen

Date
28/12/2020

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