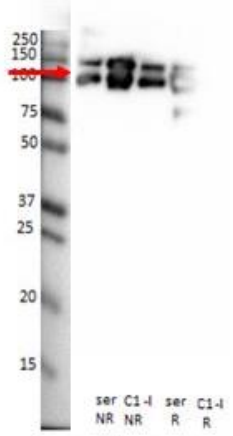
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	C1-INH, Human, clone 15/12		
Catalog number	HM2411-20UG		
Lot number	xxxxxXxxxx-X	**Expiry date**	MMM YYYY
Volume	200 µl	**Amount**	20 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	**Concentration**	100 µg/ml
Host Species	Mouse IgG2a	**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



W: Non-reduced (NR) and reduced (R) western blot with antibody 15/12. Samples loaded were serum (ser): 0.2 µg/sample and purified C1-INH (C1-I), 0.3 µg/sample.

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 15/12 can be used as capture and detection antibody.
- W: Antibody 15/12 recognizes C1-INH and the complex C1s-C1INH in western blot, both under reduced and non-reduced conditions. The expected band size is 100 kDa for C1-INH and 150 - 196 kDa for the complex.

General Information

Description

Mouse monoclonal antibody HM2411 recognizes human C1-inhibitor. The complement system plays important roles in both innate and adaptive immune response and can produce an inflammatory and protective reaction to challenges from pathogens before an adaptive response can occur. There are three pathways of complement activation. The classical pathway (CP) is initiated by Immune complexes; the lectin pathway (LP) by surface bound mannan binding lectin; and the alternative (AP) by all the surfaces that are not specifically protected against it. Each generates a C3 convertase, a serine protease that cleaves the central complement protein C3, and generates the major cleavage fragment C3b. The C3 and C5 convertases are enzymatic complexes that initiate and amplify the activity of the complement pathways and ultimately generate the cytolytic MAC (C5b-9). C1 inhibitor (C1-INH) is a heavily glycosylated single chain molecule of 500 AA. It inhibits multiple enzymes, including C1s&r of the CP and MASP-1&2 of the LP, plasmin in the fibrinolytic system and Factor XIIa&XIa of the contact and coagulation system. C1-INH is also

called C1 esterase inhibitor, due C1s is often cleaved by synthetic esters in spectrophotometry. C1-INH plays an important role in suppression of inflammation and vascular permeability. C1-INH binding of C1 to the catalytic site of both C1r and C1s releases the latter two from the complex. As a result the activation of the complement system is blocked. Binding to MASP blocks function and thereby consumption of C2,3&4. C1-INH spares the AP, leaving part of the innate antibacterial defense intact. Besides, C1-INH can directly bind and neutralize LPS, inhibiting sepsis and endotoxin shock. C1-INH administration is the common treatment for hereditary angioedema (HAE). A disease commonly caused by heterozygous deficiency of C1-INH and leading to low levels of functional C1-INH and recurrent episodes of dermal and submucosal swelling. This is mediated by its ability to control activation of the contact system in inhibiting bradykinin generation and thereby control of vascular permeability.

Immunogen	Human plasma derived C1-inhibitor purified by anion exchange chromatography, >99% pure
Aliases	EDSPD2
Cross reactivity	Not cross reactive with MASP-1,MASP-3, C1s, C1r
Gene	Gene name: SERPING1 Uniprot: P05155 Entrez Gene ID: 567801
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
Brenda Teunissen	14/07/2023

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