

## **CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

**Product name** Factor Ba neoepitope, Human, mAb D22/3

Catalog number HM2379

Lot number - Expiry date -

Formulation 0.2 µm filtered in PBS+0.02%NaN3+0.1%BSA Concentration 100 µg/ml

Host Species Mouse IgG2b Conjugate None

Endotoxin N.A. Purification Protein G

Storage 4°C

# **Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #						1		1
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 1:50.

IA: HM2379 can be used as capture and detection antibody.

### **General Information**

### Description

Monoclonal antibody D22/3 recognizes human complement factor Ba (fBa). Complement is a major defense system of innate immunity and aimed to destroy microbes. There are three pathways of complement activation. The classical and lectin pathways are initiated by the binding of recognition proteins to specific targets. The alternative pathway (AP) is continuously activated as a result of spontaneous hydrolysis of complement component C3. Complement factor B (fB) is a 93KDa glycoprotein and found essential for the activation of the AP. In the presence of Mg2+ fB binds to hydrolyzed C3b which is subsequently cleaved by factor D. Once factor B associates with C3(H2O), factor B itself changes conformation and can then be cleaved by fD, generating Ba and Bb. These fragments can initiate several biological responses. Although under debate, Ba has been associated with chemotactic capacity for neutrophils and macrophages and a role in B cell function. High Ba plasma concentration in chronic renal disease might indicate a defective immune response in these patients.

Ba is a 234 amino acid glycoprotein. The antibody was raised using a synthetic peptide corresponding to the Ba carboxyterminus and found to react with a Ba neo-epitope. This epitope is newly formed after the generation of Ba from mature fB. It should be noticed that due to unfolding the epitope can be exposed in intact fB in SDS-PAGE/western blotting. In the fluid phase the antibody is specific to Ba.

**Immunogen** 

Synthesized C-terminal peptide Ba-20C (amino acid single letter code CETIEGVDAEDGHGPGEQQKR).

References

 Opperman, M et al; Characterization of physiologic breakdown products of the complement fragment Ba. Mol Immunol. 1994, 31:307

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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 Robbert Zwinkels

Date 26/03/2019

Do you have any questions or comments regarding this product? Please contact us via <a href="mailto:support@hycultbiotech.com">support@hycultbiotech.com</a>.