

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	HBD2, Human, clone HB5C10		
Catalog number	HM2403-100UG		
Lot number	xxxxxXxxxx-X	Expiry date	MMM YYYY
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



W: Non-reduced western blot with antibody HB5C10. The expected band size is ~5 kDa.

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 HB5C10 can be used as capture and detection antibody.
- W: western blot was performed under non-reducing conditions.

General Information

Description	Monoclonal antibody 5C10 recognizes human beta defensin-2 (HBD2). hBD-2 is a cystein-rich cationic 41 amino acid antimicrobial peptide of 4-5 kDa. Human BD-2 is produced by epithelial cells upon stimulus by lipopolysaccharides and proinflammatory cytokines TNFα and IL1β. Contact of keratinocytes with gram-negative bacteria results in rapid induction of hBD-2 protein. hBD-2 has been described as a dynamic component of the local epithelial defense system of the skin, intestinal and respiratory tract, where it functions by protecting surfaces from infection. Its local expression has been associated with skin lesions like psoriasis as well as infected lung epithelia of patients with cystic fibrosis. Furthermore, in inflammatory bowel disease (IBD), expression of hBD-2 is increased in patients with IBD compared to healthy persons. The NF-κB pathway has been recognized as a key component in the induction of hBD-2 expression, however, other studies have observed induction mediated by the mitogen-activated protein kinase (MAPK) pathways. Thus, increased expression of hBD-2 in epithelial cells is associated with the proinflammatory response. This is supported by the finding that the anti-inflammatory cytokines IL-10 and IL-13 downregulate the synthesis of hBD-2 in atopic dermatitis.
Immunogen	HBD2 peptide
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
02/10/2020

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