

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	CD83, Human, clone ELBE-1		
Catalog number	HM2321		
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 #				1		1		1
Yes				•		•		•
No								
N.D.	•	•	•		•		•	

N.D.= Not Determined; IHC = Immunohistochemistry; F = Frozen sections; P = Paraffin sections; IF = Immunofluorescence; 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.

- FC: Antibody ELBE-1 stains the extracellular domain of CD83. (Ref.1).
- W: A non-reduced and/or reduced sample treatment and SDS-Page was used. The band size is 40kDa kDa (Ref.1).
- Positive control: PMBCs Double staining with CD11c-PE.

General Information

Description	Monoclonal antibody ELBE-1 recognizes human CD83. CD83 is a cell surface marker predominantly expressed on mature DCs. Expression has been found on circulating and tissue DCs. Additionally CD83 is found on activated B and T lymphocytes. Human CD83 is composed of 205 amino acids but has, due to extensive glycosylation, a molecular weight of ca 45 kDa. CD83 is expressed as a conserved noncovalently associated single chain molecule membrane protein. CD83 is considered a marker for fully matured dendritic cells in the peripheral circulation. An essential role has not been found. However, its function primarily lies in the regulation of T- and B-cell maturation and the regulation of their peripheral responses. CD83 is supposed to function as a co-stimulator for T-cell activation similar to CD80 or CD86. Enhanced expression on DCs correlates with their T cell activating capacity. Besides the membrane version of the protein also a soluble form occurs (sCD83). sCD83 levels are raised in sera from patients of chronic lymphocytic leukemia and other haematological malignant diseases and in the synovial fluid of rheumatoid arthritis. While the membrane bound form has immune stimulatory capacity, the soluble form has the opposite effect and is considered to have immunosuppressive potential. Due to its inhibitory functions, sCD83 has potential for treatment of eg. autoimmune diseases and transplantation. In contradiction to most clones, antibody ELBE-1 is besides flow cytometry applicable in western blotting and ELISA (detecting of sCD83). ELBE-1 recognizes a linear epitope and doesn't influence T cell activation.
Immunogen	huCD83Ig fusion protein
Aliases	B-cell activation protein, cell surface protein HB15
References	1. Papp, S et al. A New Monoclonal Anti-human CD83 Antibody for Flow Cytometry, Western Blot Analysis, and ELISA. Monoclon Antib Immunodiagn Immunother 2013, 32: 98.
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
16/03/2018

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