

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Shigatoxin 1, clone 13C4		
Catalog number	HM6007		
Lot number	-	Expiry date	-
Volume	1 ml	Amount	100 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA	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

*If you are interested to use this antibody for functional studies, please contact us for bulk and low endotoxin opportunities.

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 1:10.

- FS: The monoclonal antibody 13C4 is useful for the inhibition of biological activity of the toxin. For inhibition of biological activity in vitro dilutions have to be made according to the amounts of toxin to be inactivated.
- IA: The monoclonal antibody 13C4 can be used as detector.

General Information

Description The monoclonal antibody 13C4 recognizes the 1B subunit of Shiga-like toxin 1. Shiga-like toxins (SLTs), are also called Verotoxins. Enterohemorrhagic Escherichia coli (EHEC) strains which are primarily of serotypes O157:H7, O26:H11 and O111:H8 have been incriminated as etiologic agents of hemorrhagic colitis and Hemolytic-uremic syndrome, a generalized disease characterized by acute renal failure, thrombocytopenia, and microangiopathic hemolytic anemia. There are several distinct E.coli SLTs. SLT-I and SLT-II are produced by EHEC. SLT-I and Shiga toxin share >99% deduced amino acid sequence homology, whereas SLT-I and SLT-II share about 60% deduced amino acid sequence homology. SLT-I and SLT-II are antigenically distinct. The protein structure of the toxin consists of two domains: the A polypeptide that inhibits protein synthesis by targeting ribosomes, and the B polypeptide pentamer that binds to the eukaryotic cell receptor globotriaosylceramide (Gb3) leading to receptor-mediated endocytosis.

Aliases Verotoxin 1

- References**
1. Strockbine, N et al; Characterization of monoclonal antibodies against Shiga-like toxin from Escherichia coli. Infect Immun 1985, 50: 695
 2. Smith, M et al; Development of a hybrid Shiga holotoxoid vaccine to elicit heterologous protection against Shiga toxins types 1 and 2. Vaccine 2006, 24: 4122
 3. Smith, M et al; The 13C3 monoclonal antibody that neutralizes Shiga toxin type 1 (Stx1) recognizes three regions on the Stx1 subunit and prevents Stx1 from binding to its eukaryotic receptor globotriaosylceramide. Infect Immun 2006, 74: 6992

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
17/07/2018

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