

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Shigatoxin 2, clone 11E10		
Catalog number	HM6008-20UG		
Lot number	-	Expiry date	-
Volume	200 µl	Amount	20 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA	Concentration	100 µg/ml
Host Species	Mouse IgG1	Conjugate	None
Endotoxin	<24 EU/mg	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

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 11E10 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 11E10 can be used as detector.

General Information

Description The monoclonal antibody 11E10 recognizes the 2A subunit of Shiga-like toxin 2. 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. Antibodies to SLT-II can also neutralize a variant of SLT-II (designated SLT-IIV) produced by strains of E.coli that cause edema. SLT-IIV is cytotoxic for Vero but not HeLa cells, distinguishing it from SLT-II. 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 2

- References**
1. Perera, L et al; Isolation and characterization of monoclonal antibodies to Shiga-like toxin II of enterohemorrhagic Escherichia coli and use of the monoclonal antibodies in a colony enzyme-linked immunosorbent assay. J Clin Microbiol 1988, 26: 2127
 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
Brenda Teunissen

Date
13/01/2021

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