

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	CNF1/CNF2, clone JC4	Expiry date	-
Catalog number	HM6006-20UG		
Lot number	-	Amount	20 µg
Volume	200 µl	Concentration	100 µg/ml
Formulation	0.2 µm filtered in PBS+0.1%BSA	Conjugate	None
Host Species	Mouse IgG2a	Purification	Protein G
Endotoxin	<24 EU/mg		
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 JC4 is useful for inhibition of toxin activity of CNF1. Monoclonal antibody JC4 does not inhibit the toxin activity of CNF2.

General Information

Description	The monoclonal antibody JC4 is specific for Cytotoxic necrotizing factor type 1 and the highly related Cytotoxic necrotizing factor type 2 (CNF1 and CNF2) of uropathogenic Escherichia coli. CNF1 and 2 belong to a family of bacterial toxins that target the small GTP-binding Rho proteins that regulate the actin cytoskeleton. Members of this toxin family typically inactivate Rho; however, CNF1 and the CNF2 activate Rho by deamidation. CNF1 is more frequently associated with E.coli strains that cause extraintestinal infections in humans, particularly those of the urinary tract (such as cystitis, pyelonephritis and prostatitis). In CNF1-producing uropathogenic E. coli strains, CNF1 is chromosomally encoded and typically resides on a pathogenicity island that also contains hemolysin and P fimbria-related genes. Both CNF1 and the highly related, plasmid-encoded CNF2 are monomeric, cytoplasmic toxins of approximately 115 kDa. CNF1 can be structurally organized into three functional domains the N-terminal binding domain, central and the C-terminal domain. The latter exhibits the catalytic activity of the toxin. Monoclonal antibody JC4 recognizes an epitope between amino acids 169 to 191 of the N-terminal binding domain. JC4 neutralizes only CNF1.
Aliases	Cytotoxic Necrotizing Factor 1, Cytotoxic Necrotizing Factor 2
References	<ol style="list-style-type: none"> Meysick, K et al; Epitope mapping of monoclonal antibodies capable of neutralizing cytotoxic necrotizing factor type 1 of uropathogenic Escherichia coli. Infect Immun 2001, 69: 2066 McNichol, B et al; Two domains of cytotoxic necrotizing factor type 1 bind the cellular receptor, laminin receptor precursor protein. Infect Immun 2007, 75: 5095
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.