

**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	CNF1, clone NG8	<b>Expiry date</b>	-
<b>Catalog number</b>	HM6005-20UG		
<b>Lot number</b>	-	<b>Amount</b>	20 µg
<b>Volume</b>	200 µl	<b>Concentration</b>	100 µg/ml
<b>Formulation</b>	0.2 µm filtered in PBS+0.1%BSA	<b>Conjugate</b>	None
<b>Host Species</b>	Mouse IgG2a	<b>Purification</b>	Protein G
<b>Endotoxin</b>	<24 EU/mg		
<b>Storage</b>	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: For inhibition of biological activity in vitro dilutions have to be made according to the amounts of CNF1 to be inactivated.

**General Information**

**Description** The monoclonal antibody NG8 is specific for Cytotoxic necrotizing factor type 1 (CNF1) of uropathogenic Escherichia coli. CNF1 and CNF2 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 highly related 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, central and the C-terminal domain. The latter exhibits the catalytic activity of the toxin. Monoclonal antibody NG8 recognizes an epitope between amino acids 704 and 730 of the C-terminal enzymatic domain. NG8 specifically neutralizes CNF1 while lacking activity for CNF2.

**Aliases** Cytotoxic Necrotizing Factor 1

- References**
1. 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
  2. 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](mailto:support@hycultbiotech.com).