

Product datasheet for AM32101PU-N

OriGene Technologies, Inc.

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cnf1 (169-191) Mouse Monoclonal Antibody [Clone ID: JC4]

Product data:

Product Type: Primary Antibodies

Clone Name: |C4

Applications: ELISA, FN, WB

Recommended Dilution: Western Blot: Use 1/10 as starting working dilution.

Immuno Assays.

Finctional assays: JC4 is useful for Inhibition of toxin activity of CNF1.**Does not** inhibit the

toxin activity of CNF2.

In vitro dilutions have to be made according to the amounts of CNF1 or CNF2 to be

inactivated.

Reactivity: Escherichia coli

Host: Mouse Isotype: IgG2a

Clonality: Monoclonal

Specificity: 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. Clone JC4* recognizes an epitope between amino acids 169 to 191 of the N-terminal binding

domain. JC4 neutralizes only CNF1.

Formulation: PBS

State: Purified

State: Liquid 0.2 µm filtered Ig fraction

Stabilizer: 0.1% BSA

Concentration: lot specific **Purification:** Protein G

Conjugation: Unconjugated
Storage: Store at 2 - 8 °C.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 115 kDa

Database Link: Q1R2U0





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Background:

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 extraintestitinal 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.

Synonyms:

Cytotoxic necrotizing factor 1, Cytotoxic necrotizing factor 2