

AM32102PU-N**Monoclonal Antibody to CNF1 (704-730) - Liquid**

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| Alternate names: | Cytotoxic necrotizing factor 1 |
| Quantity: | 0.1 mg |
| Concentration: | 0.1 mg/ml |
| Background: | 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 <i>E. coli</i> strains that cause extraintestinal infections in humans, particularly those of the urinary tract (such as cystitis, pyelonephritis and prostatitis). In CNF1-producing uropathogenic <i>E. coli</i> 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. |
| Uniprot ID: | Q1R2U0 |
| NCBI: | YP_543855.1 |
| GeneID: | 3990770 |
| Host / Isotype: | Mouse / IgG2a |
| Clone: | NG8 |
| Immunogen: | Synthetic peptide, corresponding to amino acids 704/730 of <i>Escherichia coli</i> CNF1 |
| Format: | State: Liquid 0.2 µm filtered Stabilizers: 0.1% BSA |
| Applications: | Western Blot: Use 1/10 as starting working dilution. Dot Blot (Native conditions). Inhibition of biological activity: <i>In vitro</i> dilutions have to be made according to the amounts of CNF1 to be inactivated. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user. |
| Molecular Weight: | 115 kDa |
| Specificity: | The Monoclonal antibody clone <i>NG8</i> recognizes an epitope between amino acids 704 and 730 of the C-terminal enzymatic domain. NG8 specifically neutralizes CNF1 while lacking activity for CNF2. |
| Storage: | Store the antibody undiluted at 2-8°C. Shelf life: one year from despatch. |
| General Readings: | 1. Meysick KC, Mills M, O'Brien AD. Epitope mapping of monoclonal antibodies capable of neutralizing cytotoxic necrotizing factor type 1 of uropathogenic <i>Escherichia coli</i> . <i>Infect Immun.</i> 2001 Apr;69(4):2066-74. PubMed PMID: 11254559. |