Monoclonal Anti-Ricin Toxin B Chain (produced in vitro)

Catalog No. NR-842
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For research use only. Not for human use.

Contributor and Manufacturer:
Alison D. O’Brien, Ph.D., Chairperson, and James F. Sinclair, Ph.D., Laboratory Supervisor, Department of Microbiology and Immunology, Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA

Product Description:
Antibody Class: IgG1
Mouse monoclonal antibody to the B chain of the ricin holotoxin from Ricinus communis (R. communis) was purified using protein A affinity chromatography from supernatants obtained from the mouse hybridoma clonal cell line TFB1 (ATCC® CRL-1759™). TFB1 was generated by the fusion of SP2/5 myeloma cells with immunized mouse splenocytes.

Ricin is a cytotoxic protein isolated from the beans of the castor plant R. communis. The ricin holotoxin consists of two polypeptide chains, A and B, linked by a disulfide bond. The A chain catalytically inactivates the eukaryotic 28S ribosomal RNA subunit, resulting in the inhibition of protein synthesis and death of the cell. The ricin toxin B chain is a galactose-specific lectin that mediates the binding and delivery of the toxin to target cells. The sequence of the R. communis gene for the ricin toxin precursor protein has been reported (GenBank: X03179).

Material Provided:
Each vial contains approximately 50 µg of NR-842. Sodium azide (0.05%) was added to the preparation of purified monoclonal antibody as a preservative. The concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

Packaging/Storage:
NR-842 was packaged aseptically in cryovials. The product is provided frozen on dry ice and should be stored at -20°C or colder immediately upon arrival. Once thawed, the unused material may be stored at 4°C. Freeze-thaw cycles should be avoided.

Functional Activity:
Monoclonal antibody produced from ATCC® CRL-1759™ is specific to the B chain of ricin toxin and does not cross react with the A chain. Applications: ELISA, Western blot.

Citation:
Acknowledgment for publications should read “The following reagent was obtained through the NIH Biodefense and Emerging Infectious Research Resources Repository, NIAID, NIH: Monoclonal Anti-Ricin Toxin B Chain (produced in vitro), NR-842.”

Biosafety Level: 1

Disclaimers:
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References:

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