Polyclonal Anti-Ricin Toxin B Chain (immune globulin G, Rabbit)

Catalog No. NR-864

This reagent is the tangible property of the U.S. Government.

For research use only. Not for human use.

Contributor and Manufacturer:

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Product Description:

Polyclonal immune globulin G antibody to ricin[1,2] toxin was produced by immunization of rabbits with recombinant ricin B chain and purified from serum by caprylic acid precipitation.[3]

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.[4,5]

Material Provided:

Each vial contains approximately 0.1 mg of NR-864 in phosphate-buffered saline.

Packaging/Storage:

NR-864 was filter sterilized and 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:

NR-864 reacts with ricin holotoxin in a standard ELISA. The polyclonal immune globulin G antibody can be labeled or radiolabeled without losing specificity. Applications: ELISA.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Polyclonal Anti-Ricin Toxin B Chain (immune globulin G, Rabbit), NR-864."

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

Disclaimers:

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References:

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4. Chang, M. S., D. W. Russell, J. W. Uhr, and E. S. Vitetta. "Cloning and Expression of Recombinant Functional Ricin B Chain." Proc. Natl. Acad. Sci. USA 84 (1987): 5640–5644. PubMed: 3112772.

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5. Olsnes, S., E. Saltvedt, and A. Pihl. "Isolation and Comparison of Galactose-binding Lectins from *Abrus precatorius* and *Ricinus communis*." J. Biol. Chem. 249 (1974): 803–810. PubMed: 4811904.

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