

Ricin B (RB999): sc-52197

BACKGROUND

Ricin, a type II ribosomal inactivating protein, inhibits protein biosynthesis by its RNA N-glycosidase activity. Ricin toxin, derived from the castor bean *Ricinus communis*, is a prototypic A-B toxin in which the B chain binds to the target cell, and the A chain (RTA) mediates the toxic activity. Ricin B chain (RTB) is a lectin that is responsible for cell agglutination and binds to β -D-galactopyranoside moieties found at the cell surface (e.g., on glycoproteins), allowing the A chain to enter the cell. In turn, the A chain functions enzymatically as an RNA N-glycosidase that deurinates adenine 4324 in the 28S rRNA of the 60S ribosomal subunit. The crystal structure of ricin has been defined.

REFERENCES

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SOURCE

Ricin B (RB999) is a mouse monoclonal antibody raised against RAC120 and the B-chain of RCA60.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Ricin B (RB999) is recommended for detection of RAC120 and the B chain of RCA60 of *Ricinus communis* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Molecular Weight of Ricin B: 32/120 kDa.

SELECT PRODUCT CITATIONS

- Carter, J.E., Odumosu, O. and Langridge, W.H. 2010. Expression of a ricin toxin B subunit: Insulin fusion protein in edible plant tissues. *Mol. Biotechnol.* 44: 90-100.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.