

# Rabbit Anti-Ricin A chain antibody

# SL7140R

<b>Product Name:</b>	Ricin A chain
Chinese Name:	蓖麻毒素A链抗体
Alias:	Ricin toxin A chain; Ricin precursor; Ricin; rRNA N glycosidase; RT A; RTA; RICI_RICCO.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Ricinus communis
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	30kDa
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Ricin A chain:201-300/576
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	Ricin chain A (RTA) is a ribosome inactivating enzyme with a molecular weight of 32 kDa. RTA is normally linked by a disulfide bond to the galactose/N acetylgalactosamine binding lectin (34 kDa), also called the B chain or RTB. Together with RTB, RTA constitutes the heterodimeric cytotoxin Ricin (RCA 60) from Ricinus communis. This ricin, which is a type 2 RIP (ribosome inactivating protein) is among the most potent cytotoxins in nature. Ricin is highly toxic to animal cells and to a lesser extent to plant cells.

#### **Function:**

Ricin is highly toxic to animal cells and to a lesser extent to plant cells. The A chain acts as a glycosidase that removes a specific adenine residue from an exposed loop of the 28S rRNA (A4324 in mammals), leading to rRNA breakage. As this loop is involved in elongation factor binding, modified ribosomes are catalytically inactive and unable to support protein synthesis. The A chain can inactivate a few thousand ribosomes per minute, faster than the cell can make new ones. Therefore a single A chain molecule can kill an animal cell. The B chain binds to beta-D-galactopyranoside moieties on cell surface glycoproteins and glycolipids and facilitates the entry into the cell of the A chain; B chains are also responsible for cell agglutination (Lectin activity).

#### Subunit:

In the N-terminal section; belongs to the ribosome-inactivating protein family. Type 2 RIP subfamily. Curated Contains 2 ricin B-type lectin domains.

#### **SWISS:**

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### Gene ID:

8287993

#### Database links:

Entrez Gene: 8287993 Ricinus communis

## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.