

# Anti-UREASE (Jack Bean) (RABBIT) Antibody

Urease Antibody Catalog # ASR4613

### **Specification**

# Anti-UREASE (Jack Bean) (RABBIT) Antibody - Product Information

Host Conjugate Target Species Clonality Application Application Note	Rabbit Unconjugated Jack Bean Polyclonal WB, E, IP, I, LCI Anti-Urease Antibody has been tested in western blot and suitable against 1.0 ug of Urease [Jack Bean] in a standard ELISA using Peroxidase conjugated Affinity Purified anti-Rabbit IgG [H&L] (Goat) code #611-1302 and (ABTS (2,2'-azino-bis-[3-eth ylbenthiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:15,000 to 1:60,000 of the reconstitution concentration is suggested for this product.
Physical State Buffer	Lyophilized 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen Reconstitution Volume Reconstitution Buffer	Urease [Jack Bean] 100 µL Restore with deionized water (or equivalent)
Preservative	0.01% (w/v) Sodium Azide

## Anti-UREASE (Jack Bean) (RABBIT) Antibody - Additional Information

#### Purity

Anti-Urease is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum as well as purified and partially purified Urease [Jack Bean]. Cross reactivity against Urease from other tissues and species may occur but have not been specifically determined.

#### Storage Condition

Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

#### **Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.



# Anti-UREASE (Jack Bean) (RABBIT) Antibody - Protein Information

Name UREA

**Function** 

Urea hydrolase involved in nitrogen recycling from ureide, purine, and arginine catabolism (PubMed:<a href="http://www.uniprot.org/citations/26690979" target=" blank">26690979</a>). Is known to be highly toxic and lethal when given by intravenous route, producing convulsions and other signs of central nervous system intoxication associated with the high levels of ammonia formed in the blood of mice and rabbits (PubMed: <a href="http://www.uniprot.org/citations/26690979" target=" blank">26690979</a>). Is neurotoxic in mammals, when directly injected into hippocampus (PubMed:<a href="http://www.uniprot.org/citations/33631299" target=" blank">33631299</a>). It may induce seizures by acting at a neuronal network level, thereby disturbing electroencephalographic rhythms and causing metabolic alterations in key areas related to epileptogenesis and to neurogenic pulmonary edema (PubMed: <a href="http://www.uniprot.org/citations/33631299" target=" blank">33631299</a>). It increases calcium influx and neuronal firing rate in the hippocampus (PubMed:<a href="http://www.uniprot.org/citations/33631299" target=" blank">33631299</a>). Is able to insert itself into lipid bilayers, altering physicochemical properties of artificial membranes, and forming cation-selective ion channels (PubMed:<a href="http://www.uniprot.org/citations/24583269" target="\_blank">24583269</a>). In vitro, has the ability to induce platelet aggregation, platelet granules secretion and release of ATP (PubMed: <a href="http://www.uniprot.org/citations/11696010" target=" blank">11696010</a>). In contrast to canatoxin, another urease from C.ensiformis, is not lethal to mice when intraperitoneally injected (PubMed:<a href="http://www.uniprot.org/citations/11696010" target=" blank">11696010</a>).

## Anti-UREASE (Jack Bean) (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-UREASE (Jack Bean) (RABBIT) Antibody - Images



Western Blot of Rabbit anti-Urease (Jack Bean) Antibody. Lane 1: Urease (Jack Bean). Load: 50 ng per lane. Primary antibody: Urease primary antibody at 1:1,000 overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody (p/n 611-103-122) at 1:40,000 for 30 min at RT. Block: (p/n MB-070) for 30 min at RT. Predicted/Observed size: 90 kDa, 90 kDa for Urease.

# Anti-UREASE (Jack Bean) (RABBIT) Antibody - Background

Urea hydrolase involved in nitrogen recycling from ureide, purine, and arginine catabolism. Urease catalyzes the hydrolysis of urea to produce ammonia and carbamate (ammonia and carbonic acid). Ureases are found in numerous bacteria, fungi, algae, invertebrates, plants, in soils, as a soil enzyme. Due to the catalytic activity producing ammonia the pH of the environment increases. Ureases, when bacterial, can be a mode for the pathogens of many medical conditions such as hepatic encephalopathy, hepatic coma, urinary stones, and peptic ulcers. Urea is found naturally in the environment as well as artificially introduced. Anti-Urease antibody is ideal for researchers interested in ecosystems, microbes, and gut bacteria.