

Datasheet for 100-4182**Anti-Urease Antibody****Overview**

Description:	Anti-Urease (Jack Bean) (RABBIT) Antibody - 100-4182
Item No.:	100-4182
Size:	2 mL
Applications:	WB
Reactivity:	Jack Bean
Host Species:	Rabbit

Product Details

Background:	Urease is a protein that is commonly secreted from the bacterium <i>H. Pylori</i> and is integral to the immune response within the gastric system. Urease carries out a key enzymatic reaction in converting urea into free ammonia and carbonic acid. Urease is commonly derived from the Jack Bean plant in scientific research as the amino acid sequences are highly conserved between species and it is an abundant source of the protein. Anti-Urease Antibody is ideal for investigators in Immunology, Enzymology, and Cell Biology research.
Synonyms:	rabbit anti-Anti-Urease Antibody, Urease, Urea amidohydrolase
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	UREA_CANEN
Reactivity:	Jack Bean
Immunogen Type:	Native Protein
Immunogen:	Urease [Jack Bean]

Purity/Specificity:	Anti-Urease (Jack Bean) (Rabbit) Antibody was prepared from monospecific antiserum by a delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-rabbit serum, purified and partially purified Urease [Jack Bean]. Cross reactivity against Urease from other tissues and species may occur but have not been specifically determined.
Relevant Links:	• UniProtKB - P07374 • NCBI - AAA83831.1

Application Details

Suggested Applications:	WB (Based on references)
Application Note:	Anti-Urease Antibody has been assayed 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-ethylbenthiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:1,000 to 1:3,000 of the reconstitution concentration is suggested for Anti-Urease Antibody.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:20,000
IP:	1:100
WB:	1:500 - 1:5,000

Formulation

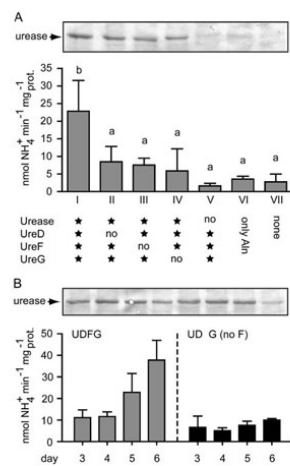
Physical State:	Lyophilized
Concentration:	90 mg/mL by Refractometry
Buffer:	0.01 M Sodium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None
Reconstitution Volume:	2.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

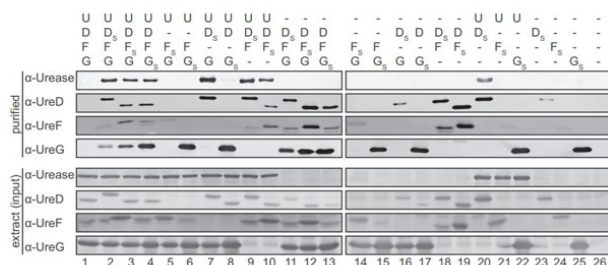
Shipping Condition:	Ambient
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Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot
Western Blot results using Anti-Urease (Jack Bean) (RABBIT) Antibody.
Functional test of rice urease and UAPs expressed in *N. benthamiana*. A, Western blot loaded with 40 µg of protein (prot.) per lane and probed with anti-urease antibody (top) and urease activity quantification (bottom) using leaf extracts from *N. benthamiana* after 5 d of transient coexpression of different combinations of OsUrease, OsUreD, OsUreF, OsUreG (lanes I–V) and Atallantoinase (lane VI) as a control. Uninfected leaves were used as an additional control (lane VII). Each urease activity was quantified using three independent leaves from different plants (n = 3). Error bars indicate sd. As indicated by lowercase letters, only activity I is different from all others with statistical significance (P < 0.01). B, Western blot and urease activity as in A from leaves coexpressing either OsUrease, OsUreD, OsUreF, OsUreG (gray columns) or OsUrease, OsUreD, OsUreG, but not OsUreF (black columns). Activities were assessed in a time course from 3 to 6 d after infiltration of the plants with *Agrobacterium*. Error bars indicate sd (n = 3 independent leaves). Fig 2. PMID: 20631318.



Western Blot

Western Blot results using Anti-Urease (Jack Bean) (RABBIT) Antibody.

Protein interactions of *A. thaliana* UAPs and urease. Urease (U) and the accessory proteins UreD, UreF, and UreG (D, F, and G) were co-expressed in leaves of *N. benthamiana* as indicated. N-terminally Strep-tagged variants of the UAPs (the respective tagged protein is labeled with S) and its interaction partners were affinity-purified from extracts and detected on Western blots. Lower panel, clarified leaf extracts (input). Upper panel, after affinity purification. The experiment was repeated three times, and a representative repeat is shown. Figure 1. PMID: 28710280.

References

- Ramlau R et al. Safety of unconventional antibody-drug conjugate L-DOS47 in a phase I/II monotherapy study targeting advanced NSCLC. *Front Oncol.* (2025)
- Myrach et al. The assembly of the plant urease activation complex and the essential role of the urease accessory protein G (UreG) in delivery of nickel to urease. *Journal of Biological Chemistry* (2017)
- Cao FQ et al. Identification and characterization of proteins involved in rice urea and arginine catabolism. *Plant Physiol.* (2010)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.