

Datasheet for 600-401-AA9**CAPS1 Antibody****Overview**

Description:	Anti-CAPS1 (RABBIT) Antibody - 600-401-AA9
Item No.:	600-401-AA9
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	CAPS1 and its related protein CAPS2 encode novel neural/endocrine-specific cytosolic and peripheral membrane proteins. Both are essential components of the synaptic vesicle priming machinery and are required for the Ca ²⁺ -regulated exocytosis of secretory vesicles; CAPS-deficient neurons contain no or very few fusion competent synaptic vesicles, causing a selective impairment of fast phasic transmitter release. CAPS1 acts at a stage in exocytosis that follows ATP-dependent priming, which involves the essential synthesis of phosphatidylinositol 4, 5-bisphosphate and is thought to be a specific regulator of large dense-core vesicle fusion.
Synonyms:	CAPS1 Antibody, CAPS, CAPS1, CADPS1, CAPS, KIAA1121, Calcium-dependent secretion activator 1, Calcium-dependent activator protein for secretion 1, CAPS-1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CADPS
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-CAPS1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 20 amino acid synthetic peptide near the C-terminus of the human CAPS1.

Purity/Specificity: Anti-CAPS1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Numerous isoforms of CAPS1 are known to exist; the lower molecular weight bands seen in the immunoblot image are likely to be these isoforms. This CAPS1 antibody is predicted to be specific to CAPS1 and not recognize CAPS2.

Relevant Links:

- [UniProtKB - Q9ULU8](#)
- [GeneID - 8618](#)
- [NCBI - NP_899631](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-CAPS1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 153 kDa in Western Blots of specific cell lysates and tissues.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:5000 - 1:10000

IF: 20 µg/mL

IHC: 5 µg/mL

WB: 0.5-1 µg/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1 mg/mL by UV absorbance at 280 nm

Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

Preservative: 0.02% (w/v) Sodium Azide

Stabilizer: None

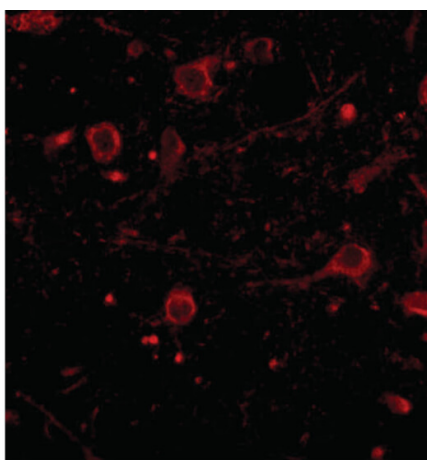
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. 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.

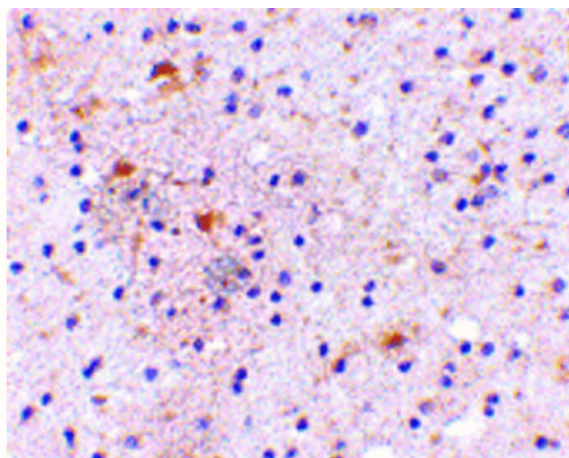
Expiration: Expiration date is one (1) year from date of receipt.

Images



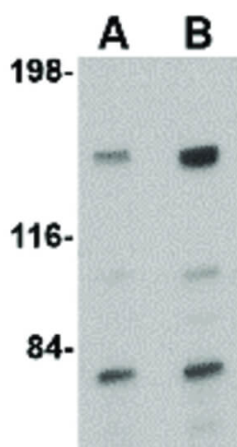
Immunofluorescence Microscopy

Immunofluorescence Microscopy of CAPS1 antibody.
Tissue: Human brain tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: CAPS1 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: CAPS1 as red fluorescent signal.



Immunohistochemistry

Immunohistochemistry of CAPS1 antibody. Tissue: Human brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: CAPS1 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: CAPS1 is nuclear and occasionally cytoplasmic. Staining: CAPS1 as precipitated red signal with hematoxylin purple nuclear counterstain.

**Western Blot**

Western Blot of CAPS1 antibody. Lane A: Rat brain tissue lysate at 0.5 $\mu\text{g/mL}$. Lane B: Rat brain tissue lysate at 1 $\mu\text{g/mL}$. Load: 35 μg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 152.7 kDa, ~150 kDa for CAPS1. Other band(s): CAPS1 splice variants and isoforms.

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.