

Datasheet for 600-401-AB1**CAPS2 Antibody****Overview**

Description:	Anti-CAPS2 (RABBIT) Antibody - 600-401-AB1
Item No.:	600-401-AB1
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	CAPS2 and the related protein CAPS1 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. Like CAPS1, numerous isoforms of CAPS2 are known to exist. These isoforms show distinct expression patterns in the brain. For example, CAPS2b showed high expression in the developing cerebellum. Furthermore, one version of CAPS2 mRNA that lacks exon 3 is detected in some autistic patients, suggesting that the differential expression pattern of CAPS2 is involved in neuronal development.
Synonyms:	CAPS2 Antibody, CAPS2, KIAA1591, Calcium-dependent secretion activator 2, Calcium-dependent activator protein for secretion 2, CAPS-2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CADPS2
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-CAPS2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 19 amino acid synthetic peptide near the internal region of the human CAPS2.
Purity/Specificity:	Anti-CAPS2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. This CAPS2 antibody is predicted to be specific to CAPS2 and not recognize CAPS1.
Relevant Links:	• UniProtKB - Q86UW7 • GeneID - 93664 • NCBI - NP_060424

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-CAPS2 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 148 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

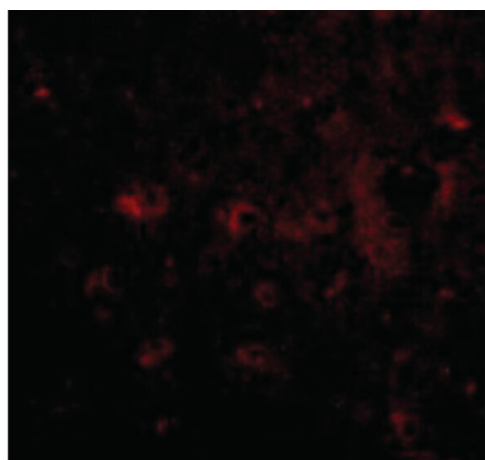
Shipping & Handling

Shipping Condition:	Dry Ice
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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.

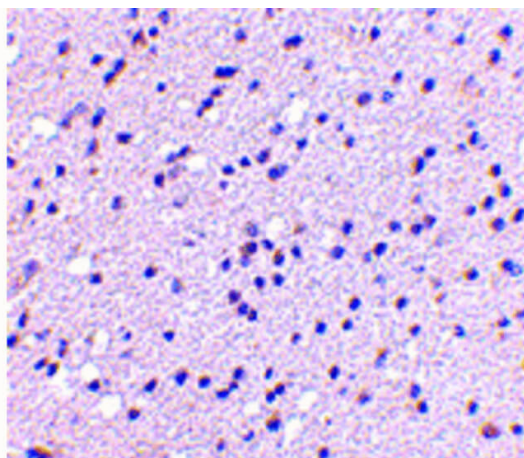
Images



Immunofluorescence Microscopy

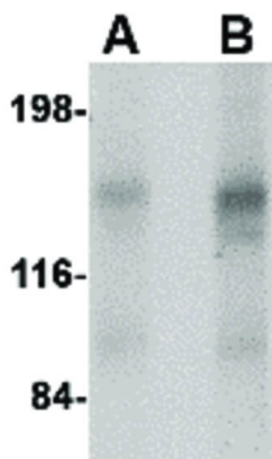
Immunofluorescence Microscopy of CAPS2 antibody.

Tissue: Human brain cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: CAPS2 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: CAPS2 as a red fluorescent signal.



Immunohistochemistry

Immunohistochemistry of CAPS2 antibody. Tissue: Human brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: CAPS2 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: CAPS2 is nuclear and occasionally cytoplasmic. Staining: CAPS2 as a precipitated red signal with hematoxylin purple nuclear counterstain

**Western Blot**

Western Blot of CAPS2 antibody. Lane A: Human brain tissue lysate at 0.5 $\mu\text{g/mL}$. Lane B: Human 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: 147.7 kDa, ~150 kDa for CAPS2.

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.