

Datasheet for 600-401-AA8**CAPN6 Antibody****Overview**

Description:	Anti-CAPN6 (RABBIT) Antibody - 600-401-AA8
Item No.:	600-401-AA8
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Calpains make up a ubiquitously expressed, well-conserved family of calcium-dependent cysteine proteases. The calpain proteins are heterodimers consisting of an invariant small subunit and variable large subunits. This large subunit possesses a cysteine protease domain, and both subunits possess calcium-binding domains. Calpains have been implicated in neurodegenerative processes as their activation can be triggered by calcium influx and oxidative stress. Calpain 6 (CAPN6) is most similar to Calpain 5; the C-terminal region of CAPN6 lacks homology to the calmodulin-like domain of other vertebrate calpains. CAPN6 is thought to be involved in the regulation of microtubule dynamics and cytoskeletal organization. CAPN6 has also been recently identified as an HIV dependency factor (HDF), suggesting that CAPN6 may be an important drug target in HIV treatment.
Synonyms:	CAPN6 Antibody, CANPX, CAPNX, CalpM, DJ914P14.1, CALPM, CANPX, Calpain-6, Calpain-like protease X-linked
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CAPN6
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-CAPN6 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 18 amino acid synthetic peptide from near the C-terminus of human CAPN6.
Purity/Specificity:	Anti-CAPN6 Antibody was Protein A purified. Cross reactivity with CAPN6 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q9Y6Q1 • GeneID - 827 • NCBI - NP_055104

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-CAPN6 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 75 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:	2.5 µg/mL
WB:	0.5-1 µg/mL

Formulation

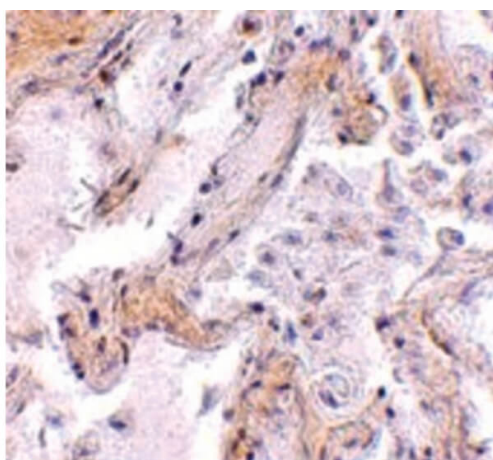
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

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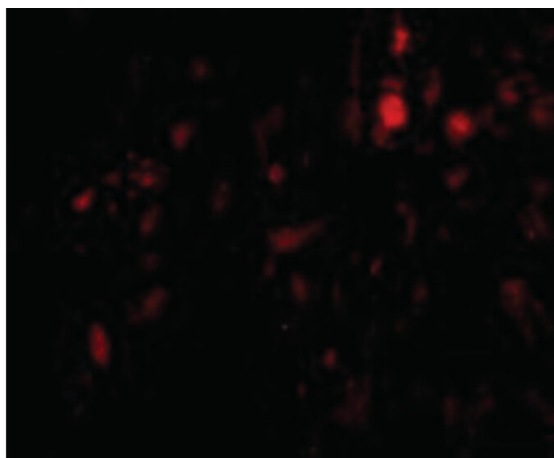
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted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

Images



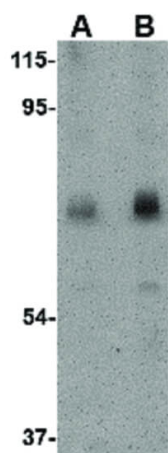
Immunohistochemistry

Immunohistochemistry of CAPN6 antibody. Tissue: Human lung tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: CAPN6 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: CAPN6 is nuclear and occasionally cytoplasmic. Staining: CAPN6 as precipitated red signal with hematoxylin purple nuclear counterstain.



Immunofluorescence Microscopy

Immunofluorescence Microscopy of CAPN6 antibody. Tissue: Human lung cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: CAPN6 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: CAPN6 as a red fluorescent signal.

**Western Blot**

Western Blot of CAPN6 antibody. Lane A: Rat lung tissue lysate at 0.5 µg/mL. Lane B: Rat lung tissue lysate at 1 µg/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: 74.5 kDa, ~75 kDa for CAPN6.

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.