

Datasheet for ABIN3044292

**anti-CAPNL1 antibody (Middle Region)**

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## Overview

Quantity:	100 µg
Target:	CAPNL1
Binding Specificity:	AA 312-326, Middle Region
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunocytochemistry (ICC), Immunohistochemistry (Frozen Sections) (IHC (fro))

## Product Details

Purpose:	Rabbit IgG polyclonal antibody for Calpain-1 catalytic subunit(CAPN1) detection. Tested with WB, IHC-P, IHC-F, ICC in Human,Mouse,Rat.
Immunogen:	A synthetic peptide corresponding to a sequence in the middle region of human Calpain 1(312-326aa EWNNVDPYERDQLRV), different from the mouse sequence by two amino acids.
Sequence:	EWNNVDPYER DQLRV
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	<p>Rabbit IgG polyclonal antibody for Calpain-1 catalytic subunit(CAPN1) detection. Tested with WB, IHC-P, IHC-F, ICC in Human,Mouse,Rat.</p> <p>Gene Name: calpain 1,(mu/l) large subunit</p> <p>Protein Name: Calpain-1 catalytic subunit</p>

## Product Details

Purification: Immunogen affinity purified.

## Target Details

Target: CAPNL1

Alternative Name: CAPN1 ([CAPNL1 Products](#))

Background: Calpain-1 catalytic subunit is a protein that in humans is encoded by the CAPN1 gene. Calpain is an intracellular protease that requires calcium for its catalytic activity. Two isozymes, calpain I(mu-calpain) and calpain II(m-calpain), with different calcium requirements, have been identified. Both are heterodimers composed of L(large, catalytic, 80 kD) and S(small, regulatory, 30 kD) subunits. The isozymes share an identical S subunit, with the differences arising from the L subunits, L1(CAPN1) and L2. By quantitative RT-PCR, Ueyama et al.(1998) found that expression of calpain-1 and calpain-2 mRNA was significantly increased in muscle biopsy samples derived from 5 men with progressive muscular dystrophy(e.g., DMD, 310200) and 2 men and 3 women with amyotrophic lateral sclerosis(ALS, 105400) compared with controls. Using cDNA clones as probes, Ohno et al.(1989, 1990) assign CANPL1 to chromosome 11.

Synonyms: Ca2 activated neutral protease antibody|Calcium activated neutral proteinase 1 antibody|Calcium activated neutral proteinase antibody|Calcium activated neutral proteinase small subunit antibody|Calcium dependent protease small subunit 1 antibody|Calcium dependent protease small subunit antibody|Calcium-activated neutral proteinase 1 antibody|Calpain 1(mu/I) large subunit antibody|Calpain 1 antibody|Calpain 1 catalytic subunit antibody|Calpain 1 large subunit antibody|Calpain Large Polypeptide L1 antibody|Calpain Large Polypeptide L1 antibody|Calpain mu type antibody|Calpain mu-type antibody|Calpain regulatory subunit antibody|Calpain small subunit 1 antibody|Calpain-1 catalytic subunit antibody|Calpain-1 large subunit antibody|Calpain1 antibody|CAN1\_HUMAN antibody|CANP 1 antibody|CANP antibody|CANP small subunit antibody|CANPL 1 antibody|CANPL1 antibody|CAPN 1 antibody|CAPN1 antibody|Cell proliferation inducing protein 30 antibody|Cell proliferation-inducing gene 30 protein antibody|Micromolar Calpain antibody|Micromolar-calpain antibody|Mu Calpain antibody|muCANP antibody|muCL antibody

UniProt: [P07384](#)

Pathways: [Apoptosis](#)

## Application Details

Application Notes:	WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Mouse, Rat IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Rat, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections. IHC-F: Concentration: 0.5-1 µg/mL, Tested Species: Rat, Predicted Species: Human, Mouse ICC: Concentration: 0.5-1 µg/mL, Tested Species: Human Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be fit for the product based on sequence similarities. Other applications have not been tested. Optimal dilutions should be determined by end users.
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Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P), IHC(F) and ICC.
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Restrictions:	For Research Use only
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## Handling

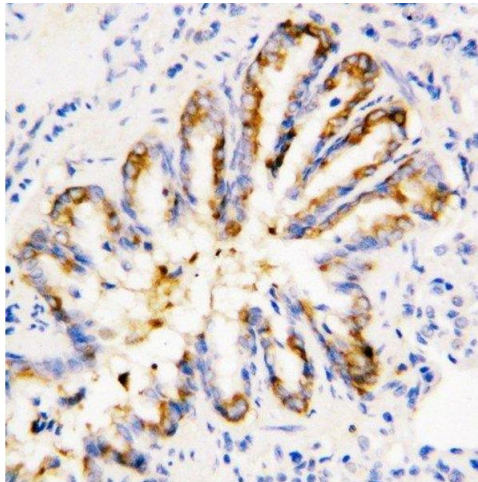
Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05 mg Thimerosal, 0.05 mg Sodium azide.
Preservative:	Thimerosal (Merthiolate), Sodium azide
Precaution of Use:	This product contains Sodium azide and Thimerosal (Merthiolate): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.
Expiry Date:	12 months

## Publications

Product cited in:	Liu, Chen, Wang, Yang, Xue, Zhu: "Msi1 confers resistance to TRAIL by activating ERK in liver
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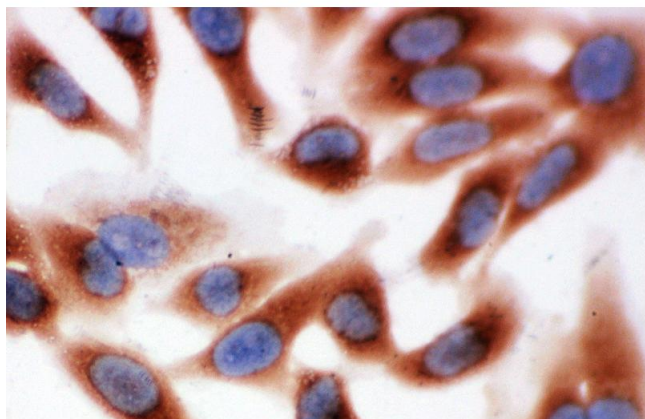
cancer cells." in: **FEBS letters**, Vol. 589, Issue 8, pp. 897-903, (2015) ([PubMed](#)).

Images



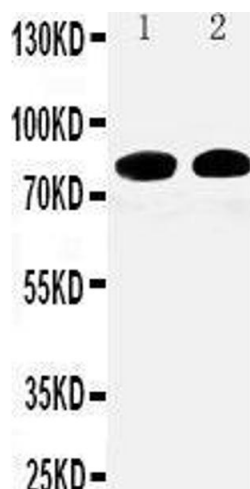
Immunohistochemistry

**Image 1.** Anti-Calpain 1 antibody, IHC(P) IHC(P): Rat Lung Tissue



Immunohistochemistry

**Image 2.** Anti-Calpain 1 antibody, ICC ICC: HELA Cell



Western Blotting

**Image 3.** Anti-Calpain 1 antibody, Western blotting Lane 1: Cell Lysate Lane 2: COLO320 Cell Lysate

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN3044292.