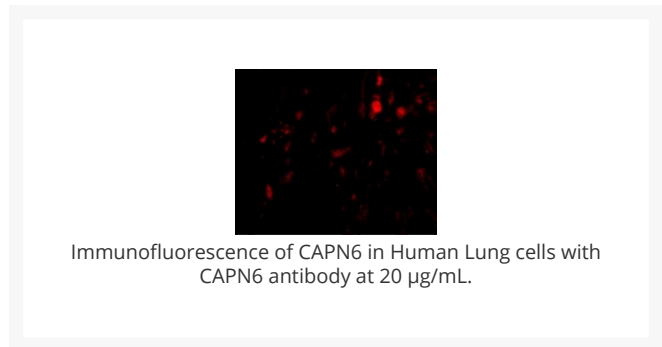
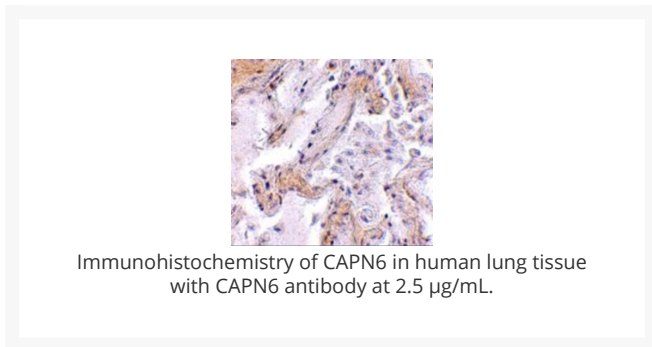
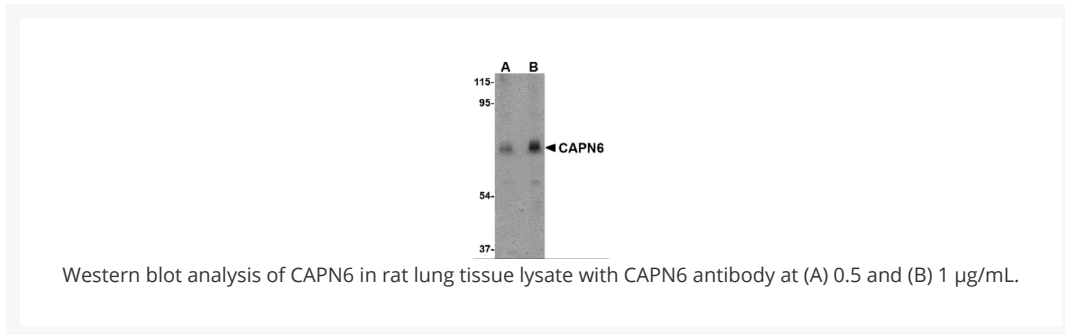




# CAPN6 Antibody

Cat. No.: 4759



## $\Psi$ Specifications

<b>HOST SPECIES:</b>	Rabbit
<b>SPECIES REACTIVITY:</b>	Human, Mouse, Rat
<b>IMMUNOGEN:</b>	CAPN6 antibody was raised against a 18 amino acid synthetic peptide from near the carboxy terminus of human CAPN6.  The immunogen is located within the last 50 amino acids of CAPN6.
<b>TESTED APPLICATIONS:</b>	ELISA, IF, IHC-P, WB

<b>APPLICATIONS:</b>	CAPN6 antibody can be used for the detection of StrepII by Western blot at 0.5 - 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.  Antibody validated: Western Blot in rat samples; Immunohistochemistry in human samples and Immunofluorescence in human samples. All other applications and species not yet tested.
<b>POSITIVE CONTROL:</b>	1) Cat. No. 1462 - Rat Lung Tissue Lysate
	2) Cat. No. 10-101 - Human Lung Tissue Slide

## Ψ Properties

<b>PURIFICATION:</b>	CAPN6 Antibody is affinity chromatography purified via peptide column.
<b>CLONALITY:</b>	Polyclonal
<b>ISOTYPE:</b>	IgG
<b>CONJUGATE:</b>	Unconjugated
<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	CAPN6 Antibody is supplied in PBS containing 0.02% sodium azide.
<b>CONCENTRATION:</b>	1 mg/mL
<b>STORAGE CONDITIONS:</b>	CAPN6 antibody can be stored at 4 °C for three months and -20 °C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

## Ψ Additional Info

<b>OFFICIAL SYMBOL:</b>	CAPN6
<b>ALTERNATE NAMES:</b>	CAPN6 Antibody: CANPX, CAPNX, CalpM, DJ914P14.1, CALPM, CANPX, Calpain-6, Calpain-like protease X-linked
<b>ACCESSION NO.:</b>	NP_055104
<b>PROTEIN GI NO.:</b>	13186316
<b>GENE ID:</b>	827
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.

## Ψ Background and References

<b>BACKGROUND:</b>	CAPN6 Antibody: 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.
<b>REFERENCES:</b>	1) Croall DE and Ersfeld K. The calpains: modular designs and functional diversity. <i>Genome Biol.</i> 2007; 8:216.
	2) Dear N, Matena K, Vingron M, et al. A new subfamily of vertebrate calpains lacking a calmodulin-like domain: implications for calpain regulation and evolution. <i>Genomics</i> 1997; 45:175-84.
	3) Tonami K, Kurihara Y, Aburatani J, et al. Calpain 6 is involved in microtubule stabilization and cytoskeletal organization. <i>Mol. Cell. Biol.</i> 2007; 27:2548-61.
	4) Brass AL, Dykxhoorn DM, Benita Y, et al. Identification of host proteins required for HIV infection through a functional genomic screen. <i>Science</i> 2008; 319:921-6.

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