

CAPNS1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant CAPNS1.

Catalog # AT1391a

Specification

CAPNS1 Antibody (monoclonal) (M01) - Product Information

Application	WB, IHC, IF
Primary Accession	P04632
Other Accession	BC000592
Reactivity	Human, Rat
Host	mouse
Clonality	Monoclonal
Isotype	IgG1 Kappa
Calculated MW	28316

CAPNS1 Antibody (monoclonal) (M01) - Additional Information

Gene ID 826

Other Names

Calpain small subunit 1, CSS1, Calcium-activated neutral proteinase small subunit, CANP small subunit, Calcium-dependent protease small subunit, CDPS, Calcium-dependent protease small subunit 1, Calpain regulatory subunit, CAPNS1, CAPN4, CAPNS

Target/Specificity

CAPNS1 (AAH00592, 172 a.a. ~ 260 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

WB~~1:500~1000

IHC~~1:100~500

IF~~1:50~200

Format

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

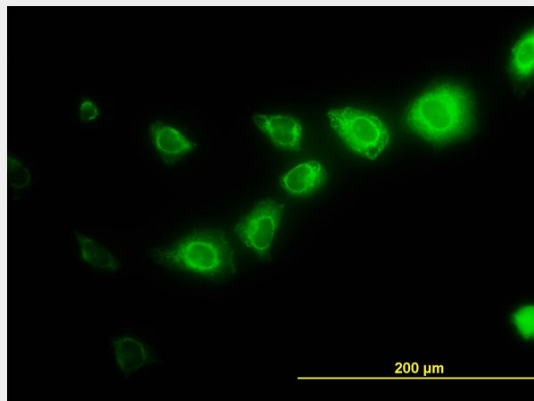
CAPNS1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

CAPNS1 Antibody (monoclonal) (M01) - Protocols

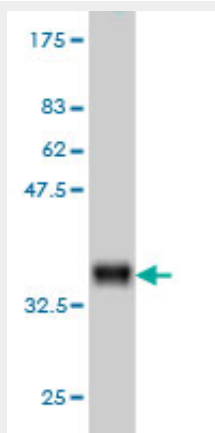
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

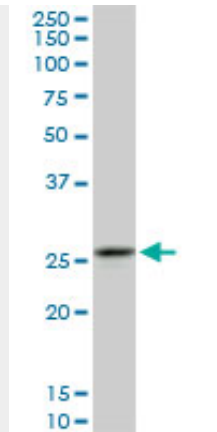
CAPNS1 Antibody (monoclonal) (M01) - Images



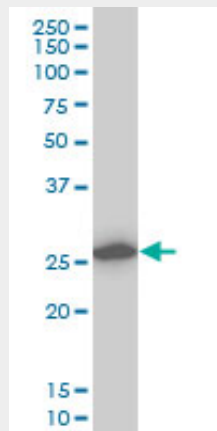
Immunofluorescence of monoclonal antibody to CAPNS1 on HeLa cell. [antibody concentration 20 ug/ml]



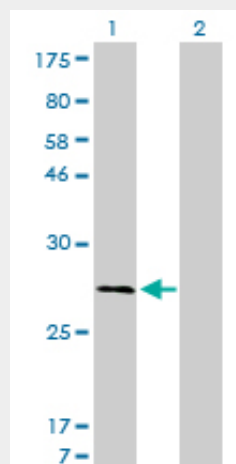
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (35.42 KDa) .



CAPNS1 monoclonal antibody (M01), clone 3C4. Western Blot analysis of CAPNS1 expression in PC-12 ((Cat # AT1391a)

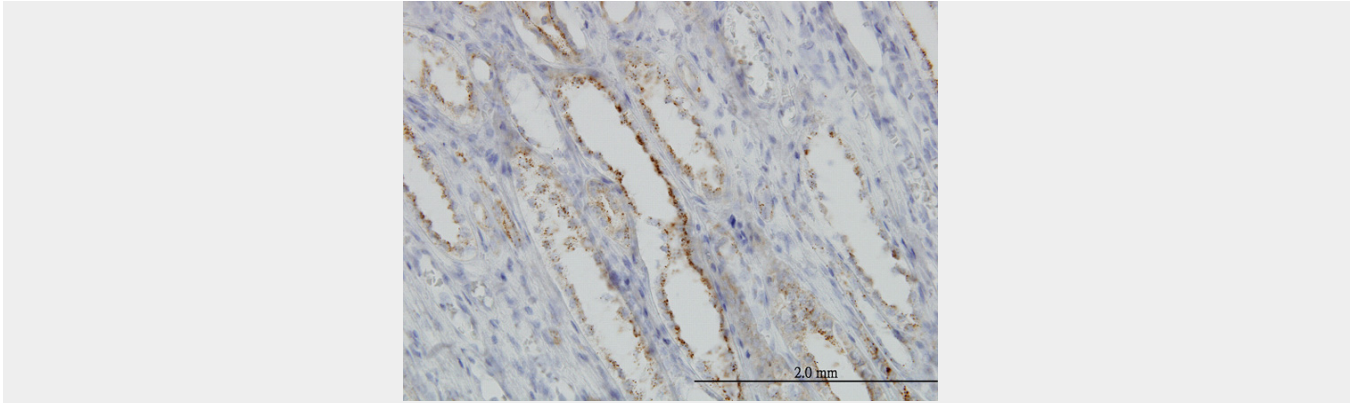


CAPNS1 monoclonal antibody (M01), clone 3C4 Western Blot analysis of CAPNS1 expression in A-431 ((Cat # AT1391a)

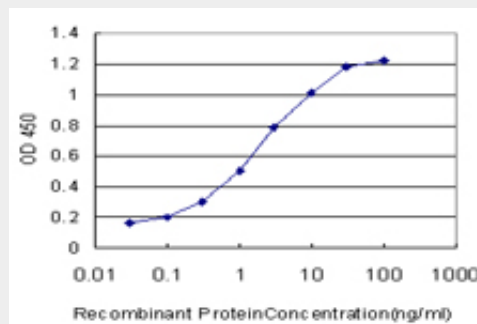


Western Blot analysis of CAPNS1 expression in transfected 293T cell line by CAPNS1 monoclonal antibody (M01), clone 3C4.

Lane 1: CAPNS1 transfected lysate(28.3 KDa).
Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to CAPNS1 on formalin-fixed paraffin-embedded human kidney. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged CAPNS1 is approximately 0.1ng/ml as a capture antibody.

CAPNS1 Antibody (monoclonal) (M01) - Background

Calpains are a ubiquitous, well-conserved family of calcium-dependent, cysteine proteases. Calpain families have been implicated in neurodegenerative processes, as their activation can be triggered by calcium influx and oxidative stress. Calpain I and II are heterodimeric with distinct large subunits associated with common small subunits, all of which are encoded by different genes. This gene encodes a small subunit common to both calpain I and II and is associated with myotonic dystrophy. Two transcript variants encoding the same protein have been identified for this gene.

CAPNS1 Antibody (monoclonal) (M01) - References

1. Overexpression of a Minimal Domain of Calpastatin Suppresses IL-6 Production and Th17 Development via Reduced NF- κ B and Increased STAT5 Signals. Iguchi-Hashimoto M, Usui T, Yoshifuji H, Shimizu M, Kobayashi S, Ito Y, Murakami K, Shiomi A, Yukawa N, Kawabata D, Nojima T, Ohmura K, Fujii T, Mimori T. *PLoS One*. 2011;6(10):e27020. Epub 2011 Oct 27. 2. The calpain inhibitor calpeptin prevents bleomycin-induced pulmonary fibrosis in mice. Tabata C, Tabata R, Nakano T. *Clin Exp Immunol*. 2010 Sep 15. doi: 10.1111/j.1365-2249.2010.04257.x. [Epub ahead of print] 3. Vitamin E and C supplementation does not ameliorate muscle dysfunction following anterior cruciate ligament surgery. Barker T, Leonard SW, Hansen J, Trawick RH, Ingram R, Burdett G, Lebold KM, Walker JA, Traber MG. *Free Radic Biol Med*. 2009 Sep 11. [Epub ahead of print]