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CAPNS1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant CAPNS1.
Catalog # AT1391a

Product Information

Application	WB, IHC, IF, E
Primary Accession	P04632
Other Accession	BC000592
Reactivity	Human, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	3C4
Calculated MW	28316

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 E~~N/A
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.

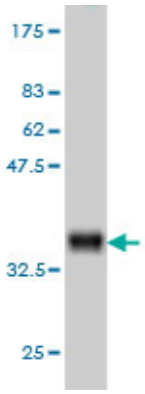
Background

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.

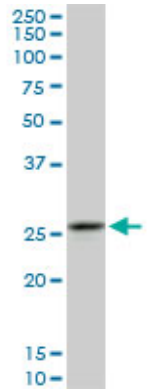
References

1.Overexpression of a Minimal Domain of Calpastatin Suppresses IL-6 Production and Th17 Development via Reduced NF-kB 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]

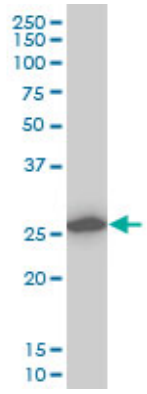
Images



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



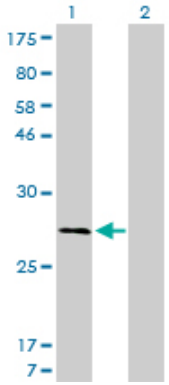
CAPNS1 monoclonal antibody (M01), clone 3C4. Western Blot analysis of CAPNS1 expression in PC-12 ((Cat # AT1391a)

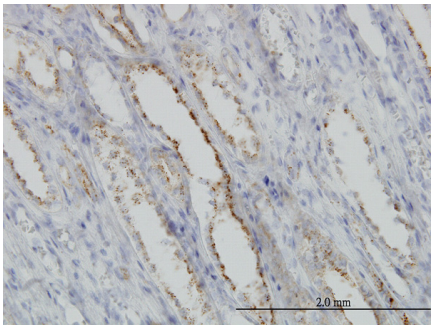


CAPNS1 monoclonal antibody (M01), clone 3C4 Western Blot analysis of CAPNS1 expression in A-431 ((Cat # AT1391a)

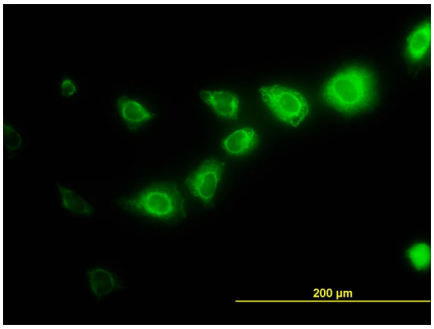
Western Blot analysis of CAPNS1 expression in transfected 293T cell line by CAPNS1 monoclonal antibody (M01), clone 3C4.

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

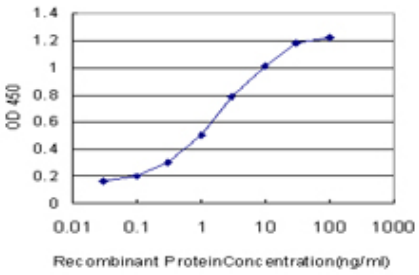




Immunoperoxidase of monoclonal antibody to CAPNS1 on formalin-fixed paraffin-embedded human kidney. [antibody concentration 3 ug/ml]



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



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.