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CAPN9 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant CAPN9.
Catalog # AT1390a

Product Information

Application	WB, IHC, E
Primary Accession	O14815
Other Accession	NM_006615
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3A6
Calculated MW	79097

Additional Information

Gene ID	10753
Other Names	Calpain-9, 3422-, Digestive tract-specific calpain, New calpain 4, nCL-4, Protein CG36, CAPN9, NCL4
Target/Specificity	CAPN9 (NP_006606, 591 a.a. ~ 690 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 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	CAPN9 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

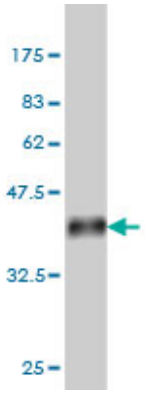
Background

Calpains are ubiquitous, well-conserved family of calcium-dependent, cysteine proteases. The calpain proteins are heterodimers consisting of an invariant small subunit and variable large subunits. The 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. The protein encoded by this gene is expressed predominantly in stomach and small intestine and may have specialized functions in the digestive tract. This gene is thought to be associated with gastric cancer. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene.

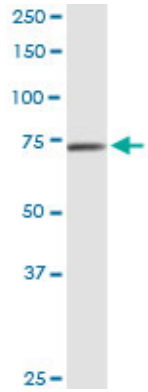
References

1.Expression of the calpain system is associated with poor clinical outcome in gastro-oesophageal adenocarcinomas.Storr SJ, Pu X, Davis J, Lobo D, Reece-Smith AM, Parsons SL, Madhusudan S, Martin SG.J Gastroenterol. 2013 Jan 19. [Epub ahead of print]2.Calpain 8/nCL-2 and Calpain 9/nCL-4 Constitute an Active Protease Complex, G-Calpain, Involved in Gastric Mucosal Defense.Hata S, Abe M, Suzuki H, Kitamura F, Toyama-Sorimachi N, Abe K, Sakimura K, Sorimachi H.PLoS Genet. 2010 Jul 29;6(7):e1001040.3.Role of calpain-9 and PKC-delta in the apoptotic mechanism of lumen formation in CEACAM1 transfected breast epithelial cells.Chen CJ, Nguyen T, Shively JE.Exp Cell Res. 2009 Nov 10. [Epub ahead of print]

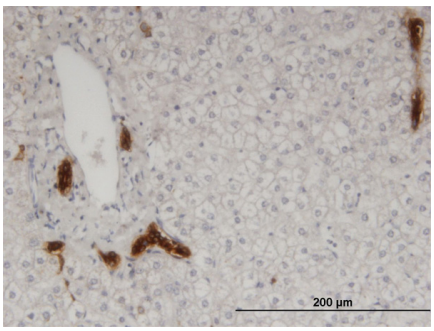
Images



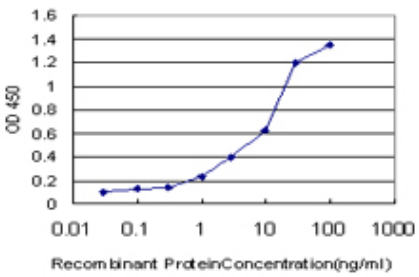
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



CAPN9 monoclonal antibody (M02), clone 3A6. Western Blot analysis of CAPN9 expression in human colon.



Immunoperoxidase of monoclonal antibody to CAPN9 on formalin-fixed paraffin-embedded human liver. [antibody concentration 1 ug/ml]



Detection limit for recombinant GST tagged CAPN9 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'.