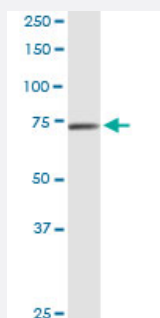


# CAPN9 monoclonal antibody (M02), clone 3A6

Catalog # H00010753-M02

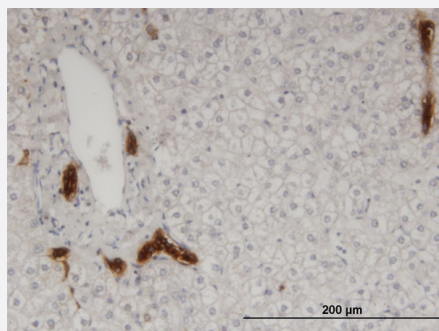
Size 100 ug

## Applications



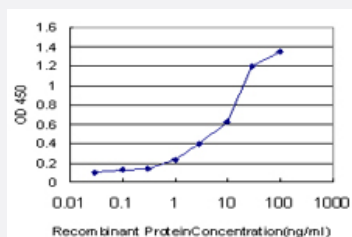
### Western Blot (Tissue lysate)

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



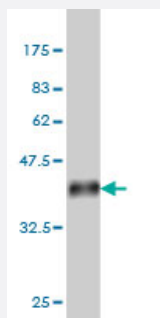
### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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



### Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged CAPN9 is approximately 0.1 ng/ml as a capture antibody.



Western Blot detection against Immunogen (36.74 KDa) .

## Specification

<b>Product Description</b>	Mouse monoclonal antibody raised against a partial recombinant CAPN9.
<b>Immunogen</b>	CAPN9 (NP_006606, 591 a.a. ~ 690 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Sequence</b>	DKLKQWINLFLRFADKSGTMSTYELRTALKAAAGFQLSSHLLQLMLRYADEELQLDFDDFLNCLV RLENASRVFQALSTKNKEFIHLNINEFIHLMNI
<b>Host</b>	Mouse
<b>Reactivity</b>	Human
<b>Interspecies Antigen Sequence</b>	Mouse (85); Rat (85)
<b>Isotype</b>	IgG2a Kappa
<b>Quality Control Testing</b>	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .
<b>Storage Buffer</b>	In 1x PBS, pH 7.4
<b>Storage Instruction</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## Applications

- Western Blot (Tissue lysate)

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

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

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[Protocol Download](#)

- ELISA

## Gene Info — CAPN9

Entrez GeneID [10753](#)

GeneBank Accession# [NM\\_006615](#)

Protein Accession# [NP\\_006606](#)

Gene Name CAPN9

Gene Alias GC36, nCL-4

Gene Description calpain 9

Omim ID [606401](#)

Gene Ontology [Hyperlink](#)

### Gene Summary

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. [provided by RefSeq]

Other Designations OTTHUMP00000035899|OTTHUMP00000035900|novel calpain large subunit-4

## Publication Reference

- [Calpain 9 as a therapeutic target in TGFβ-induced mesenchymal transition and fibrosis.](#)

Kim DH, Beckett JD, Nagpal V, Seman-Senderos MA, Gould RA, Creamer TJ, MacFarlane EG, Chen Y, Bedja D, Butcher JT, Mitzner W, Rouf R, Hata S, Warren DS, Dietz HC.

Science Translational Medicine 2019 Jul; 11(501):eaau2814.

Application: WB, Mouse, NMuMG cells

- [Low calpain-9 is associated with adverse disease-specific survival following endocrine therapy in breast cancer.](#)

Davis J, Martin SG, Patel PM, Green AR, Rakha EA, Ellis IO, Storr SJ.

BMC cancer 2014 Dec; 14(1):995.

Application: IHC-P, Human, Breast cancer

- [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.

Journal of Gastroenterology 2013 Jan; 48(11):1213.

Application: IHC-P, Human, Gastric/gastro-oesophageal cancer

- [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 Genetics 2010 Jul; 6(7):e1001040.

Application: IF, IHC, WB-Ti, Mouse, Mouse stomach

- [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.

Experimental Cell Research 2010 Feb; 316(4):638.

Application: WB-Tr, Human, MCF-7 cells

## Disease

- [Adenocarcinoma](#)
- [Esophageal Neoplasms](#)

- [Genetic Predisposition to Disease](#)
- [Tobacco Use Disorder](#)