

**GCA Antibody (monoclonal) (M01)****Mouse monoclonal antibody raised against a full-length recombinant GCA.****Catalog # AT2171a****Specification**

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**GCA Antibody (monoclonal) (M01) - Product Information**

Application	WB, IF, E
Primary Accession	<a href="#">P28676</a>
Other Accession	<a href="#">BC005214</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	24010

**GCA Antibody (monoclonal) (M01) - Additional Information****Gene ID** 25801**Other Names**

Grancalcin, GCA, GCL

**Target/Specificity**

GCA (AAH05214, 1 a.a. ~ 217 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution**

WB~~1:500~1000

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**

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

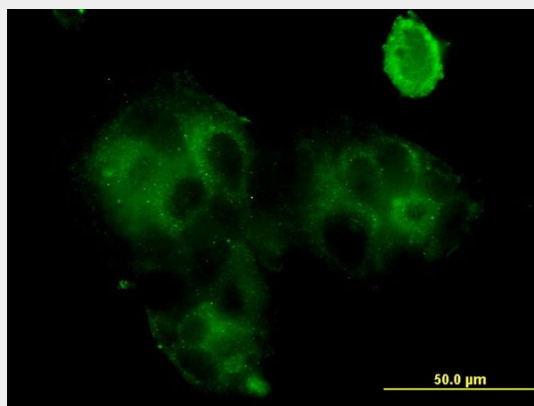
**GCA Antibody (monoclonal) (M01) - Protocols**

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

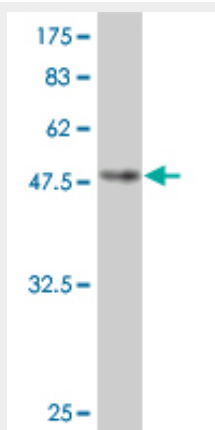
- [Western Blot](#)
- [Blocking Peptides](#)

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

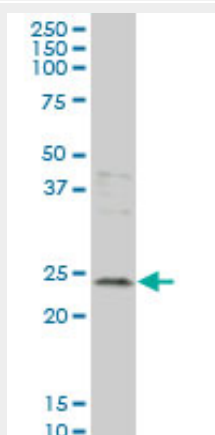
## GCA Antibody (monoclonal) (M01) - Images



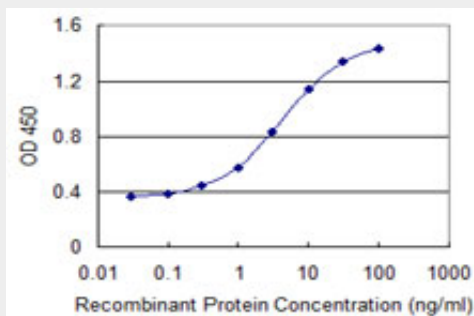
Immunofluorescence of monoclonal antibody to GCA on MCF-7 cell . [antibody concentration 10 ug/ml]



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (49.61 KDa) .



GCA monoclonal antibody (M01), clone 2F5 Western Blot analysis of GCA expression in MCF-7 (Cat # AT2171a )



Detection limit for recombinant GST tagged GCA is 0.03 ng/ml as a capture antibody.

### **GCA Antibody (monoclonal) (M01) - Background**

This gene product, grancalcin, is a calcium-binding protein abundant in neutrophils and macrophages. It belongs to the penta-EF-hand subfamily of proteins which includes sorcin, calpain, and ALG-2. Grancalcin localization is dependent upon calcium and magnesium. In the absence of divalent cation, grancalcin localizes to the cytosolic fraction; with magnesium alone, it partitions with the granule fraction; and in the presence of magnesium and calcium, it associates with both the granule and membrane fractions, suggesting a role for grancalcin in granule-membrane fusion and degranulation.

### **GCA Antibody (monoclonal) (M01) - References**

New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496. IFIH1-GCA-KCNH7 locus is not associated with genetic susceptibility to multiple sclerosis in French patients. Couturier N, et al. Eur J Hum Genet, 2009 Jun. PMID 19156166. IFIH1-GCA-KCNH7 locus: influence on multiple sclerosis risk. Mart?nez A, et al. Eur J Hum Genet, 2008 Jul. PMID 18285833. The association between the IFIH1 locus and type 1 diabetes. Qu HQ, et al. Diabetologia, 2008 Mar. PMID 18071670. A protein-protein interaction network for human inherited ataxias and disorders of Purkinje cell degeneration. Lim J, et al. Cell, 2006 May 19. PMID 16713569.