

## GCA Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full-length recombinant GCA.

Catalog # AT2171a

### Product Information

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|-------------------|--------------------------|
| 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              |
| Clone Names       | 2F5                      |
| Calculated MW     | 24010                    |

### Additional Information

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|                    |                                                                                                                   |
|--------------------|-------------------------------------------------------------------------------------------------------------------|
| 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. |

### Background

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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.

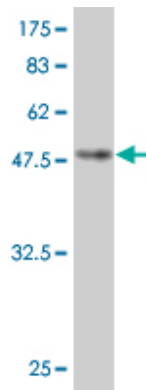
### References

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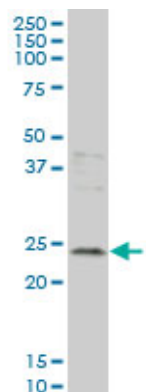
New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes

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. Martnez 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.

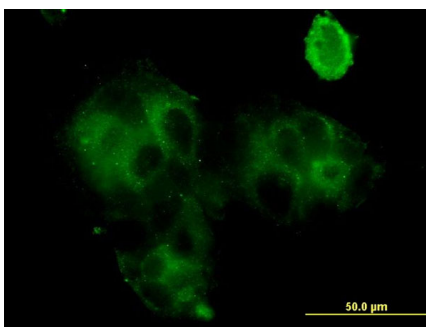
## Images



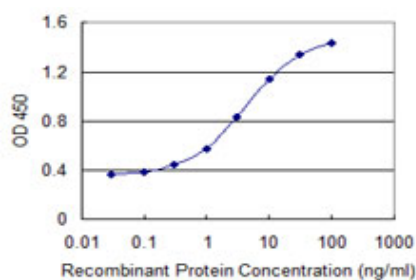
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (49.61 kDa) .



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



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



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

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