

GRN Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant GRN.

Catalog # AT2266a

Specification

GRN Antibody (monoclonal) (M01) - Product Information

Application	IF, WB, E
Primary Accession	P28799
Other Accession	NM_002087
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	63544

GRN Antibody (monoclonal) (M01) - Additional Information

Gene ID 2896

Other Names

Granulins, Proepithelin, PEPI, Acrogranin, Glycoprotein of 88 Kda, Progranulin, Paraganulin, Granulin-1, Granulin G, Granulin-2, Granulin F, Granulin-3, Granulin B, Granulin-4, Granulin A, Granulin-5, Granulin C, Granulin-6, Granulin D, Granulin-7, Granulin E, GRN

Target/Specificity

GRN (NP_002078, 494 a.a. ~ 593 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

WB~~1:500~1000

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

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

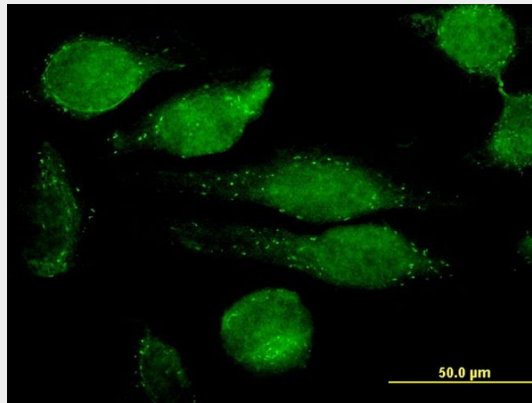
GRN Antibody (monoclonal) (M01) - Protocols

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

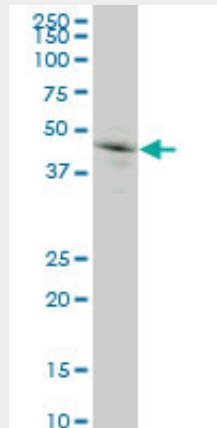
- [Western Blot](#)
- [Blocking Peptides](#)

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

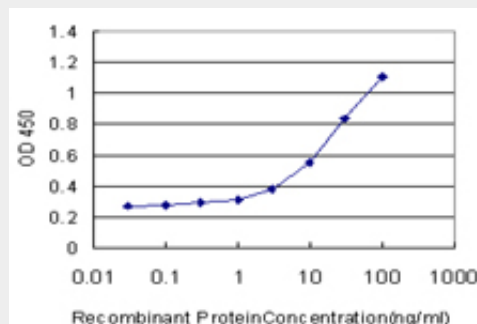
GRN Antibody (monoclonal) (M01) - Images



Immunofluorescence of monoclonal antibody to GRN on HeLa cell. [antibody concentration 10 ug/ml]



GRN monoclonal antibody (M01), clone 1F5 Western Blot analysis of GRN expression in HeLa (Cat # L013V1).



Detection limit for recombinant GST tagged GRN is approximately 1ng/ml as a capture antibody.

GRN Antibody (monoclonal) (M01) - Background

Granulins are a family of secreted, glycosylated peptides that are cleaved from a single precursor protein with 7.5 repeats of a highly conserved 12-cysteine granulin/epithelin motif. The 88 kDa precursor protein, progranulin, is also called proepithelin and PC cell-derived growth factor. Cleavage of the signal peptide produces mature granulin which can be further cleaved into a variety of active, 6 kDa peptides. These smaller cleavage products are named granulin A, granulin B, granulin C, etc. Epithelins 1 and 2 are synonymous with granulins A and B, respectively. Both the peptides and intact granulin protein regulate cell growth. However, different members of the granulin protein family may act as inhibitors, stimulators, or have dual actions on cell growth. Granulin family members are important in normal development, wound healing, and tumorigenesis.

GRN Antibody (monoclonal) (M01) - References

Prion Protein Codon 129 Polymorphism Modifies Age at Onset of Frontotemporal Dementia With the C.709-1G>A Progranulin Mutation. Moreno F, et al. *Alzheimer Dis Assoc Disord*, 2010 Aug 12. PMID 20711061. Variation at the NFATC2 Locus Increases the Risk of Thiazolidinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. *Diabetes Care*, 2010 Jul 13. PMID 20628086. MicroRNA-29b regulates the expression level of human progranulin, a secreted glycoprotein implicated in frontotemporal dementia. Jiao J, et al. *PLoS One*, 2010 May 10. PMID 20479936. Progranulin gene variability increases the risk for primary progressive multiple sclerosis in males. Fenoglio C, et al. *Genes Immun*, 2010 Sep. PMID 20463744. Role of progranulin as a biomarker for Alzheimer's disease. Sleegers K, et al. *Biomark Med*, 2010 Feb. PMID 20387302.