

GRN Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant GRN. Catalog # AT2266a

Product Information

| Application | WB, IF, E |
|-------------------|------------------|
| Primary Accession | <u>P28799</u> |
| Other Accession | <u>NM_002087</u> |
| Reactivity | Human |
| Host | mouse |
| Clonality | monoclonal |
| Isotype | IgG2a Kappa |
| Clone Names | 1F5 |
| Calculated MW | 63544 |

Additional Information

| Gene ID | 2896 |
|--------------------|--|
| Other Names | Granulins, Proepithelin, PEPI, Acrogranin, Glycoprotein of 88 Kda, Progranulin, Paragranulin, 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 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 | GRN Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures. |

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

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 Thiazolinedinedione-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.

Images

1.4

1 \$ 0.8 0.6 0.4 0.2 0.01

0.1

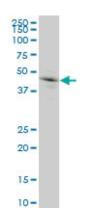
1

Recombinant ProteinConcentration(ng/ml)

10

100

1000



50.0 u

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

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

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

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