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Rabbit Anti-GFI1 antibody

SL13337R

Product Name:	GFI1
Chinese Name:	自主生长因子GFI1抗体
Alias:	GFI 1; GFI1; GFI-1; GFI1_HUMAN; Growth factor independence 1; growth factor independent 1; Growth factor independent protein 1; SCN2; Zinc finger protein 163; Zinc finger protein Gfi 1; Zinc finger protein Gfi-1; Zinc finger protein Gfi1; ZNF 163; ZNF163.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Horse,Rabbit,Sheep,Xenopus laevis
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	45kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GFI1/ZNF163:301-400/422
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Growth factor independent 1 (Gfi-1) is a transcriptional repressor that specifically binds to the DNA consensus sequence TAAATCAC(A/T)GCA. The carboxy-terminus of Gfi-1 contains six C2H2-type zinc finger motifs, and zinc fingers 3, 4 and 5 are required for the binding of Gfi-1 to its DNA binding site. Gfi-1 also contains a 20 amino acid SNAG

domain which mediates transcriptional repression. It represses Bax at the mRNA and protein levels, resulting in the inhibition of cell death. Gfi1 is expressed outside the lymphoid system in granulocytes and activated macrophages. Gfi-1B, a related protein, is a transcriptional repressor primarily expressed in bone marrow and spleen. Gfi-1B is a direct repressor of the p21 promoter and the Socs 1 and 3 promoters. The genes encoding human Gfi-1 and Gfi-1B map to chromosome 1p22 and 9q34.3, respectively.

Function:
Transcription factor regulating the expression of genes active during S-phase of the cell cycle in hematopoietic cells. Represses ELA2 transcription.

Subunit:
Interacts with U2AF1L4. Component of RCOR-GFI-KDM1A-HDAC complexes. Interacts directly with RCOR1, KDM1A and HDAC2 (By similarity). Also interacts with HDAC1. Interacts (via the zinc-finger domain) with ARIH2; the interaction prevents GFI1 ubiquitination and proteasomal degradation. Interacts with PIAS3; the interaction relieves the inhibitory effect of PIAS3 on STAT3-mediated transcriptional activity. Forms a complex with EHMT2 and HDAC1 to promote 'Lys-9' dimethylation of H3 (H3K9Me2) and repress expression of target genes. Interacts directly with EHMT2. Component of the GFI1-AJUBA-HDAC1 repressor complex. Interacts directly with AJUBA (via ITS LIM domains); the interaction results in the HDAC-dependent corepression of a subset of GFI1 target genes and, occurs independently of the SNAG domain. Interacts with SPI1; the interaction inhibits SPI1 transcriptional activity and represses SPI1-regulated macrophage-specific genes required for proper granulocyte development. Interacts with RUNX1T1; the interaction represses HDAC-mediated transcriptional activity. Interacts with RELA; the interaction occurs on liposaccharide (LPS) stimulation and controls RELA DNA binding activity and regulates endotoxin-mediated TOLL-like receptor inflammatory response. Interacts (via the C-terminal zinc fingers) with ZBTB17; the interaction results in the recruitment of GFI1 to the CDKN1A/p21 and CDKN1B promoters and repression of transcription.

Subcellular Location:
Nucleus. Note=Colocalizes with PIAS3 and RUNX1T1 in nuclear dots.

Post-translational modifications:
Ubiquitinated.

DISEASE:
Defects in GFI1 are a cause of neutropenia severe congenital autosomal dominant type 2 (SCN2) [MIM:613107]. SCN2 is a disorder of hematopoiesis characterized by a maturation arrest of granulopoiesis at the level of promyelocytes with peripheral blood absolute neutrophil counts below 0.5 x 10(9)/l and early onset of severe bacterial infections.
Defects in GFI1 are a cause of dominant nonimmune chronic idiopathic neutropenia of adults (NI-CINA) [MIM:607847]. NI-CINA is a relatively mild form of neutropenia diagnosed in adults, but predisposing to leukemia in a subset of patients.

Similarity:
Contains 6 C2H2-type zinc fingers.

SWISS:
Q99684

Gene ID:
2672

Database links:

Entrez Gene: 2672Human

Entrez Gene: 14581Mouse

Entrez Gene: 24388Rat

Omim: 600871Human

SwissProt: Q99684Human

SwissProt: P70338Mouse

SwissProt: Q07120Rat

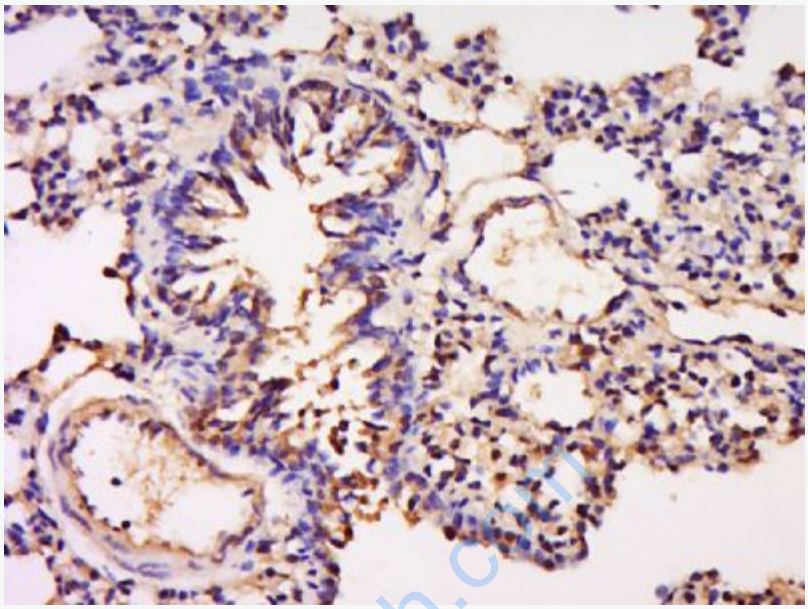
Unigene: 73172Human

Unigene: 2078Mouse

Unigene: 453139Mouse

Unigene: 10935Ra

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:	 Tissue/cell: Rat lung tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-GFI1 Polyclonal Antibody, Unconjugated(SL13337R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining