



Rabbit Anti-GFI1B antibody

SL9881R

Product Name:	GFI1B
Chinese Name:	自主生长因子1B抗体
Alias:	Potential regulator of CDKN1A translocated in CML; GFI 1B; GFI-1B; gfi1b; GFI1B protein; GFI1B_HUMAN; Growth factor independent 1B protein; Growth factor independent protein 1B; Potential regulator of CDKN1A; Translocated in CML; Zinc finger protein Gfi-1b.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	37kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GFI1B:171-270/330
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:	Essential proto-oncogenic transcriptional regulator necessary for development and differentiation of erythroid and megakaryocytic lineages. Transcriptional repressor or activator depending on both promoter and cell type context; represses promoter activity of SOCS1 and SOCS3 and thus, may regulate cytokine signaling pathways. Cooperates

with GATA1 to repress target gene transcription, such as the apoptosis regulator BCL2L1; GFI1B silencing in leukemic cell lines markedly increase apoptosis rate. Inhibits down-regulation of MYC and MYB as well as the cyclin-dependent kinase inhibitor CDKN1A/P21WAF1 in IL6-treated myelomonocytic cells. Represses expression of GATA3 in T-cell lymphomas and inhibits GATA1-mediated transcription; as GATA1 also mediates erythroid GFI1B transcription, both GATA1 and GFI1B participate in a feedback regulatory pathway controlling the expression of GFI1B gene in erythroid cells. Suppresses GATA1-mediated stimulation of GFI1B promoter through protein interaction. Binds to gamma-satellite DNA and to its own promoter, auto-repressing its own expression. Alters histone methylation by recruiting histone methyltransferase to target genes promoters. Plays a role in heterochromatin formation.

Function:

Essential proto-oncogenic transcriptional regulator necessary for development and differentiation of erythroid and megakaryocytic lineages. Component of a RCOR-GFI-KDM1A-HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development and controls hematopoietic differentiation. Transcriptional repressor or activator depending on both promoter and cell type context; represses promoter activity of SOCS1 and SOCS3 and thus, may regulate cytokine signaling pathways. Cooperates with GATA1 to repress target gene transcription, such as the apoptosis regulator BCL2L1; GFI1B silencing in leukemic cell lines markedly increase apoptosis rate. Inhibits down-regulation of MYC and MYB as well as the cyclin-dependent kinase inhibitor CDKN1A/P21WAF1 in IL6-treated myelomonocytic cells. Represses expression of GATA3 in T-cell lymphomas and inhibits GATA1-mediated transcription; as GATA1 also mediates erythroid GFI1B transcription, both GATA1 and GFI1B participate in a feedback regulatory pathway controlling the expression of GFI1B gene in erythroid cells. Suppresses GATA1-mediated stimulation of GFI1B promoter through protein interaction. Binds to gamma-satellite DNA and to its own promoter, auto-repressing its own expression. Alters histone methylation by recruiting histone methyltransferase to target genes promoters. Plays a role in heterochromatin formation.

Subunit:

Component of a RCOR-GFI-KDM1A-HDAC complex. Interacts directly with RCOR1, KDM1A and HDAC2 (By similarity). Forms a complex with GATA1. Interacts with histone methyltransferases EHMT2 and SUV39H1. Interacts with ARIH2 (via RING-type 2). Interacts with RUNX1T1.

Subcellular Location:

Nucleus.

Tissue Specificity:

Expressed in bone marrow and fetal liver, but also detectable in fetal spleen, fetal thymus, and testes. Detected in hematopoietic stem cells, erythroblasts, and megakaryocytes. Overexpressed in bone marrow of patients with erythroleukemia and

megakaryocytic leukemia as well as in their corresponding leukemic cell lines, and markedly repressed in severe aplastic anemia (SAA).

Post-translational modifications:

Methylation at Lys-8 in the SNAG domain seems required for the recruitment of the corepressor complex.

Similarity:

Contains 6 C2H2-type zinc fingers.

SWISS:

Q5VTD9

Gene ID:

8328

Database links:

[Entrez Gene: 8328](#)Human

[Omir: 604383](#)Human

[SwissProt: Q5VTD9](#)Human

[Unigene: 553160](#)Human

Important Note:

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