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GFI1B Rabbit pAb

Catalog # AP97861

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q5VTD9
Other Accession	Q5VTD9
Predicted	Rat, Pig, Human, Mouse, Rabbit, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37492
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GFI1B
Epitope Specificity	171-270/330
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 6 C2H2-type zinc fingers.
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.
Post-translational modifications	Methylation at Lys-8 in the SNAG domain seems required for the recruitment of the corepressor complex.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	8328
Other Names	BDPLT17; ZNF163B; GFI1B_HUMAN; GFI1B; Growth factor independent protein 1B; Potential regulator of CDKN1A translocated in CML; growth factor independent 1B transcriptional repressor; growth factor independent 1B (potential regulator of CDKN1A, translocated in CML)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	GFI1B
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.
Cellular Location	Nucleus.
Tissue Location	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)

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