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KLF1 Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22456b

Product Information

Application	WB, E
Primary Accession	Q13351
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit Ig
Clone Names	R02929
Calculated MW	38221

Additional Information

Gene ID	10661
Other Names	Krueppel-like factor 1, Erythroid krueppel-like transcription factor, EKLF, KLF1, EKLF
Target/Specificity	This KLF1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between amino acids from the human region of human KLF1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	KLF1 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KLF1
Synonyms	EKLF
Function	Transcription regulator of erythrocyte development that probably serves as a general switch factor during erythropoiesis. Is a dual regulator of fetal-to-adult globin switching. Binds to the CACCC box in the beta-globin

	gene promoter and acts as a preferential activator of this gene. Furthermore, it binds to the BCL11A promoter and activates expression of BCL11A, which in turn represses the HBG1 and HBG2 genes. This dual activity ensures that, in most adults, fetal hemoglobin levels are low. Able to activate CD44 and AQP1 promoters (PubMed:21055716). When sumoylated, acts as a transcriptional repressor by promoting interaction with CDH2/MI2beta and also represses megakaryocytic differentiation.
Cellular Location	Nucleus. Note=Colocalizes with SUMO1 in nuclear speckles.
Tissue Location	Expression restricted to adult bone marrow and fetal liver. Not expressed in myeloid nor lymphoid cell lines

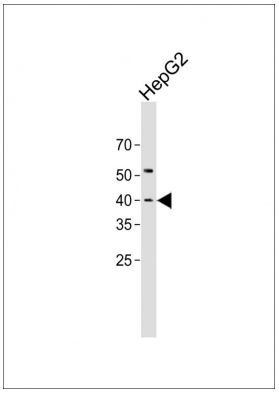
Background

Transcription regulator of erythrocyte development that probably serves as a general switch factor during erythropoiesis. Is a dual regulator of fetal-to-adult globin switching. Binds to the CACCC box in the beta-globin gene promoter and acts as a preferential activator of this gene. Furthermore, it binds to the BCL11A promoter and activates expression of BCL11A, which in turn represses the HBG1 and HBG2 genes. This dual activity ensures that, in most adults, fetal hemoglobin levels are low. Able to activate CD44 and AQP1 promoters. When sumoylated, acts as a transcriptional repressor by promoting interaction with CDH2/MI2beta and also represses megakaryocytic differentiation.

References

Bieker J.J.,et al.DNA Cell Biol. 15:347-352(1996).
van Ree J.H.,et al.Genomics 39:393-395(1997).
Grimwood J.,et al.Nature 428:529-535(2004).
Zhang W.,et al.Proc. Natl. Acad. Sci. U.S.A. 95:9855-9860(1998).
Arnaud L.,et al.Am. J. Hum. Genet. 87:721-727(2010).

Images



All lanes: Anti-KLF1 Antibody (C-Term) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 38 KDa Blocking/Dilution buffer: 5% NFDM/TBST.