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Rabbit Anti-KLF1, 2, 4 antibody

SL9526R

Product Name:	KLF1, 2, 4
Chinese Name:	上皮Zinc finger protein1, 2, 4抗体
Alias:	Krueppel-like factor1, 2, 4; KLF1; KLF2; KLF4; KLF 1; KLF 2; KLF 4; KLF-1; KLF-2; KLF-4; AP2REP; EZF; IKLF; Kruppel-like factor 4 (gut); basic transcription element binding protein 2; basic transcription element binding protein BTEB2; BTE binding protein 2; BTEB2; CKLF; Colon krueppel like factor; EKLF; Epithelial zinc finger protein EZF; Erythroid krueppel like transcription factor; Erythroid transcription factor; GC box binding protein 2; Gklf; Gut-enriched krueppel like factor; Intestinal enriched krueppel like factor; Kruppel like factor 1 (erythroid); Kruppel-like factor 2 (lung); Lklf; Lung krueppel like factor; Gut-enriched krueppel-like factor.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,
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:	33kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human KLF1, 2, 4:265-362/362
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:	This gene encodes a hematopoietic-specific transcription factor that induces high-level expression of adult beta-globin and other erythroid genes. The zinc-finger protein binds to the DNA sequence CCACACCCT found in the beta hemoglobin promoter. Heterozygous loss-of-function mutations in this gene result in the dominant In(Lu) blood phenotype. [provided by RefSeq, Oct 2009]. **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. When sumoylated, acts as a transcriptional repressor by promoting interaction with CDH2/MI2beta and also represses megakaryocytic differentiation (By similarity). **Subunit:** Interacts with CBP and EP300; the interactions enhance the transactivation activity. Interacts with PCAF; the interaction does not acetylate EKLF and inhibits its transactivation activity (By similarity). **Subcellular Location:** Nucleus. Note=Colocalizes with SUMO1 in nuclear speckles. **Tissue Specificity:** Expression restricted to adult bone marrow and fetal liver. Not expressed in myeloid nor lymphoid cell lines. **Post-translational modifications:** Acetylated; can be acetylated on both Lys-274 and Lys-288. Acetylation on Lys-274 (by CBP) appears to be the major site affecting EKLF transactivation activity (By similarity). Sumoylated; sumoylation, promoted by PIAS1, leads to repression of megakaryocyte differentiation. Also promotes the interaction with the CDH4 subunit of the NuRD repression complex (By similarity). Phosphorylated primarily on serine residues in the transactivation domain. Phosphorylation on Thr-23 is critical for the transactivation activity (By similarity). **DISEASE:** Defects in KLF1 are the cause of congenital dyserythropoietic anemia type 4 (CDA4) [MIM:613673]. It is a blood disorder characterized by ineffective erythropoiesis and hemolysis resulting in anemia. Circulating erythroblasts and erythroblasts in the bone marrow show various morphologic abnormalities. Affected individuals with CDA4 also have increased levels of fetal hemoglobin.

	Similarity: Belongs to the krueppel C2H2-type zinc-finger protein family. Contains 3 C2H2-type zinc fingers. **SWISS:** Q13351 **Gene ID:** 10661 **Database links:** Entrez Gene: 10661Human Entrez Gene: 16596Mouse Omim: 600599Human SwissProt: Q13351Human SwissProt: P46099Mouse Unigene: 37860Human Unigene: 4847Mouse **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.