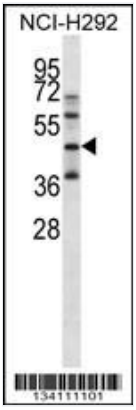
KLF1 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	KLF1, Polyclonal Antibody
Full Product Name	KLF1, CT (KLF1, EKLF, Krueppel-like factor 1, Erythroid krueppel-like transcription factor) (APC)
Product Gene Name	anti-KLF1 antibody
Product Synonym Names	KLF1; EKLF; Krueppel-like factor 1; Erythroid krueppel-like transcription factor
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with Allophycocyanin (APC).
Purity/Purification	Purified by Protein A Affinity Chromatography.
Preparation and Storage	Store product at 4 degree C in the dark. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: APC conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	38,221 Da
OMIM	U37106 Genomic DNA
3D Structure	ModBase 3D Structure for Q13351
Immunogen	KLF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 247-276 amino acids from the C-terminal region of human KLF1.
Conjugate	APC
Note	Preservative Free
Special Handling	Light sensitive
Product Categories/Family for anti-KLF1 antibody	Antibodies; Transcription Factors
Applications Tested/Suitable for anti-KLF1 antibody	Western Blot (WB), FLISA
Application Notes for anti-KLF1 antibody	WB: 1:100-500 FLISA: 1:1,000 Applications are based on unconjugated antibody.
Related Product Information for anti-KLF1 antibody	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.
Product References and Citations for anti-KLF1 antibody	Borg, J., et al. Nat. Genet. 42(9):801-805(2010). Zhou, D., et al. Nat. Genet. 42(9):742-744(2010). Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010): Papachatzopoulou, A., et al. Hemoglobin 34(4):333-342(2010). Ganesh, S.K., et al. Nat. Genet. 41(11):1191-1198(2009).

Other Notes	Small volumes of anti-KLF1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for KLF1 purchase	MBS6313898 is an antibody targeting KLF1. Also known as KLF1, CT (KLF1, EKLF, Krueppel-like factor 1, Erythroid krueppel-like transcription factor) (APC). Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-KLF1 antibody
KLF1 Antibody (C-term) western blot analysis in NCI-H292 cell line lysates (35ug/lane).This demonstrates the KLF1 antibody detected the KLF1 protein (arrow).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for KLF1. It may not necessarily be applicable to this product.

NCBI GI #	10835246
NCBI GeneID	10661
NCBI Accession #	NP_006554.1
UniProt Primary Accession #	Q13351
UniProt Secondary Accession #	Q6PIJ5; Q92899
UniProt Related Accession #	Q13351
GenBank Nucleotide #	NM_006563.4
NCBI Official Full Name	Krueppel-like factor 1
NCBI Official Synonym Full Names	Kruppel like factor 1
NCBI Official Symbol	KLF1
NCBI Official Synonym Symbols	EKLF
UniProt Protein Name	Krueppel-like factor 1
UniProt Synonym Protein Names	Erythroid krueppel-like transcription factor; EKLF
Protein Family	Krueppel-like factor
UniProt Gene Name	KLF1
UniProt Synonym Gene Names	EKLF; EKLF
NCBI Protein Information	Krueppel-like factor 1

UniProt Comments for KLF1	KLF1: 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. Defects in KLF1 are the cause of congenital dyserythropoietic anemia type 4 (CDA4). 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. Belongs to the krueppel C2H2-type zinc-finger protein family. Protein type: C2H2-type zinc finger protein; DNA-binding; Transcription factor Chromosomal Location of Human Ortholog: 19p13.13 Cellular Component: nuclear chromatin; nucleus Molecular Function: transcription factor activity Biological Process: erythrocyte differentiation; positive regulation of transcription, DNA-dependent; regulation of transcription, DNA-dependent Disease: Anemia, Congenital Dyserythropoietic, Type Iv; Blood Group--lutheran Inhibitor; Fetal Hemoglobin Quantitative Trait Locus 6
Research Articles on KLF1	**1.** a broad range of hitherto unrelated human red cell disorders are caused by variants in KLF1, a master regulator of erythropoiesis, which were previously considered to be extremely rare causes of human genetic disease [review]
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