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KLF1 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP14499b

Specification

KLF1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q13351

KLF1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 10661

Other Names
Krueppel-like factor 1, Erythroid krueppel-like transcription factor, EKLF, KLF1, EKLF

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

KLF1 Antibody (C-term) Blocking Peptide - 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. 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

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KLF1 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

KLF1 Antibody (C-term) Blocking Peptide - Images

KLF1 Antibody (C-term) Blocking Peptide - Background

This gene encodes a hematopoietic-specific transcriptionfactor that induces high-level expression of adult beta-globin andother erythroid genes. The zinc-finger protein binds to the DNAsequence CCACACCCT found in the beta hemoglobin promoter.Heterozygous loss-of-function mutations in this gene result in thedominant In(Lu) blood phenotype.

KLF1 Antibody (C-term) Blocking Peptide - References

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)