

Product name:	NF-E4 (Acetyl Lys43) Rabbit Polyclonal Antibody
Cat number:	ABN06229
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized acetyl-peptide derived from the human NF-E4 around the acetylation site of K43.
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,IHC 1:50-1:300,ELISA 1:2000-1:20000
Molecular Weight:	19kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

The erythroid-specific protein encoded by this gene, and the ubiquitous transcription factor CP2, form the stage selector protein (SSP) complex, which is involved in preferential expression of the gamma-globin genes in fetal erythroid cells. Alternate use of an in-frame upstream non-AUG (CUG) translation initiation codon, and a downstream AUG codon, results in two isoforms. While the long isoform (22 kDa) acts as an activator, the short isoform (14 kDa) has been shown to repress gamma-globin gene expression. This gene is located in an intron of the FBXL13 gene on the opposite strand. [provided by RefSeq, Jul 2008],function:Functions as part of the SSP (stage selector protein) complex, a complex that contributes to the preferential expression of the gamma-gene in fetal erythroid cells by facilitating the interaction of the gamma-globin genes with enhancer elements contained in the locus control region (LCR). The complex binds to the stage selector element (SSE) in the proximal gamma-globin promoter. In contrast, isoform 2 acts as a repressor of gamma-globin gene expression by preventing NFE2 and RNA polymerase II recruitment to the promoter.,PTM:Acetylation at Lys-43 prolongs the protein half-life by preventing ubiquitin-mediated degradation and reduces the interaction between NF-E4 and HDAC1, potentially maximizing the activating ability of the factor at the gamma-promoter.,PTM:Ubiquitinated; leading to its degradation by the proteasome. Acetylation at Lys-43 prevents ubiquitination.,sequence caution:Unusual initiator. The initiator methionine is coded by a non-canonical CTG leucine codon.,subunit:Component of the SSP (stage selector protein) complex, which appears to be a heteromer of TFCP2 and 2 copies of NFE4. Interacts with HDAC1 and PCAF. Isoform 2 interacts with TFCP2.,tissue specificity:Specifically expressed in fetal liver, cord blood and bone marrow. Also expressed in the K562 and HEL cell lines, which constitutively express the fetal globin genes.,