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Datasheet for ABIN7266919  
**anti-EAF1 antibody (AA 50-120)**

1 Image

Overview

Quantity:	100 µL
Target:	EAF1
Binding Specificity:	AA 50-120
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This EAF1 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	EAF1 Rabbit pAb
Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 50-120 of human EAF1 (NP_149074.3).
Sequence:	LQVGKGDEVT ITLPHIPGST PPMTVFKGNK RPYQKDCVLI INHDTGEYVL EKLSSSIQVK KTRAEGSSKI Q
Isotype:	IgG
Cross-Reactivity:	Human, Rat
Characteristics:	Polyclonal Antibodies
Purification:	Affinity purification

## Target Details

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Target: EAF1

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Alternative Name: EAF1 ([EAF1 Products](#))

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Background: Actin is a key regulator of RNA polymerase (Pol) II-dependent transcription. Positive transcription elongation factor b (P-TEFb), a Cdk9/cyclin T1 heterodimer, has been reported to play a critical role in transcription elongation. However, the relationship between actin and P-TEFb is still not clear. In this study, actin was found to interact with Cdk9, a catalytic subunit of P-TEFb, in elongation complexes. Using immunofluorescence and immunoprecipitation assays, Cdk9 was found to bind to G-actin through the conserved Thr-186 in the T-loop. Overexpression and in vitro kinase assays showed that G-actin promotes P-TEFb-dependent phosphorylation of the Pol II C-terminal domain. An in vitro transcription experiment revealed that the interaction between G-actin and Cdk9 stimulated Pol II transcription elongation. CHIP and immobilized template assays indicated that actin recruited Cdk9 to a transcriptional template in vivo and in vitro. Using cytokine IL-6-inducible p21 gene expression system, we revealed that actin recruited Cdk9 to endogenous gene. Moreover, overexpression of actin and Cdk9 increased histone H3 acetylation and acetylated histone H3 binding to a transcriptional template through the interaction with histone acetyltransferase, p300. Taken together, our results suggested that actin participates in transcription elongation by recruiting Cdk9 for phosphorylation of the Pol II C-terminal domain, and the actin-Cdk9 interaction promotes chromatin remodeling.,EAF1,Epigenetics & Nuclear Signaling,EAF1

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Molecular Weight: 17kDa/29kDa

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Gene ID: 85403

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UniProt: [Q96JC9](#)

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## Application Details

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Application Notes: WB,1:500 - 1:2000

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Restrictions: For Research Use only

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## Handling

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Format: Liquid

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Buffer: PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.

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Preservative: Sodium azide

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Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

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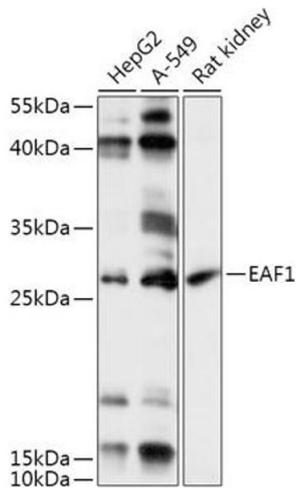
## Handling

should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Store at -20°C. Avoid freeze / thaw cycles.

## Images



### Western Blotting

**Image 1.** Western blot analysis of extracts of various cell lines, using E antibody (ABIN7266919) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3 % nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 60s.