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Anti-EGR Antibody

Catalog # AP53666

Product Information

Application	WB, IF
Primary Accession	P18146
Other Accession	P11161
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	57507

Additional Information

Gene ID	1958
Other Names	EGR1; KROX24; ZNF225; Early growth response protein 1; EGR-1; AT225; Nerve growth factor-induced protein A; NGFI-A; Transcription factor ETR103; Transcription factor Zif268; Zinc finger protein 225; Zinc finger protein Krox-24; EGR2; KROX20; E3 SUMO-protein ligase EGR2; AT591; Early growth response protein 2; EGR-2; Zinc finger protein Krox-20
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human EGR1. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IF~~1/50 - 1/200
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

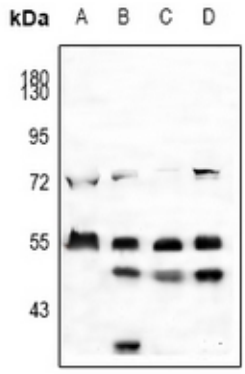
Name	EGR1
Synonyms	KROX24, ZNF225 {ECO:0000303|PubMed:21103
Function	Transcriptional regulator (PubMed: 20121949). Recognizes and binds to the DNA sequence 5'-GCG(T/G)GGGCG-3'(EGR-site) in the promoter region of target genes (By similarity). Binds double-stranded target DNA, irrespective of the cytosine methylation status (PubMed:25258363, PubMed:25999311). Regulates the transcription of numerous target genes, and thereby plays an important role in regulating the response to growth factors, DNA damage, and ischemia. Plays a role in the regulation of cell survival, proliferation and cell death. Activates expression of p53/TP53 and TGFB1, and thereby helps prevent tumor formation. Required for normal progress through mitosis and

	normal proliferation of hepatocytes after partial hepatectomy. Mediates responses to ischemia and hypoxia; regulates the expression of proteins such as IL1B and CXCL2 that are involved in inflammatory processes and development of tissue damage after ischemia. Regulates biosynthesis of luteinizing hormone (LHB) in the pituitary (By similarity). Regulates the amplitude of the expression rhythms of clock genes: BMAL1, PER2 and NR1D1 in the liver via the activation of PER1 (clock repressor) transcription. Regulates the rhythmic expression of core-clock gene BMAL1 in the suprachiasmatic nucleus (SCN) (By similarity).
Cellular Location	Nucleus. Cytoplasm
Tissue Location	Detected in neutrophils (at protein level).

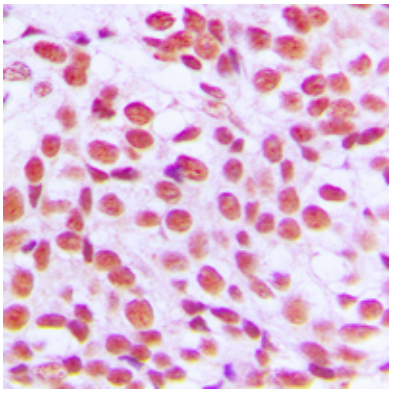
Background

Rabbit polyclonal antibody to EGR

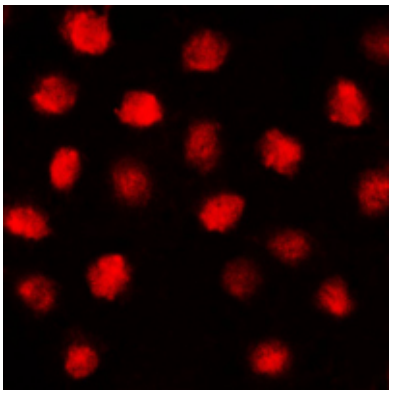
Images



Western blot analysis of EGR expression in Hela (A), PC3 (B), rat ovary (C), MCF7 (D) whole cell lysates.



Immunohistochemical analysis of EGR staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of EGR staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

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