

EGR1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2904a

Specification

EGR1 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region IF, WB, FC,E <u>P18146</u> <u>P08046</u>, <u>O29W20</u>, <u>O6GOH4</u> Human, Mouse Xenopus, Bovine Rabbit Polyclonal Rabbit IgG 57507 9-37

EGR1 Antibody (N-term) - Additional Information

Gene ID 1958

Other Names

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, EGR1, KROX24, ZNF225

Target/Specificity

This EGR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 9-37 amino acids from the N-terminal region of human EGR1.

Dilution IF~~1:10~50 WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

EGR1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

EGR1 Antibody (N-term) - 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).

EGR1 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

EGR1 Antibody (N-term) - Images





Confocal immunofluorescent analysis of EGR1 Antibody (N-term)(Cat#AP2904a) with hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



Western blot analysis of EGR1 Antibody (N-term) (Cat. #AP2904a) in mouse NIH-3T3 tissue lysates (35ug/lane). EGR1 (arrow) was detected using the purified Pab.



EGR1 Antibody (N-term) (Cat. #AP2904a) western blot analysis in MDA-MB231 cell line lysates (35ug/lane).This demonstrates the EGR1 antibody detected the EGR1 protein (arrow).





EGR1 Antibody (N-term) (Cat. #AP2904a) flow cytometric analysis of WiDr cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

EGR1 Antibody (N-term) - Background

EGR1 belongs to the EGR family of C2H2-type zinc-finger proteins. It is a nuclear protein and functions as a transcriptional regulator. The products of target genes it activates are required for differentitation and mitogenesis.

EGR1 Antibody (N-term) - References

Chan, I.H., et.al., Clin. Chim. Acta 411 (1-2), 67-71 (2010)