

Anti-EGR-1 (RABBIT) Antibody
EGR-1 Antibody
Catalog # ASR5281

Specification

Anti-EGR-1 (RABBIT) Antibody - Product Information

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human, Mouse
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	This affinity purified antibody has been tested for use in ELISA, immunohistochemistry and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band at ~58 kDa in size corresponding to EGR-1 by western blotting in the appropriate cell lysate or extract.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity-purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near amino acids 85-115 of Human EGR-1.
Preservative	0.01% (w/v) Sodium Azide

Anti-EGR-1 (RABBIT) Antibody - Additional Information

Gene ID 1958

Other Names
1958

Purity

This affinity purified antibody is directed against human EGR-1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human and chimpanzee sources based on 100% homology for the immunogen sequence. This antibody is expected to cross react with EGR-1.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-EGR-1 (RABBIT) Antibody - 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

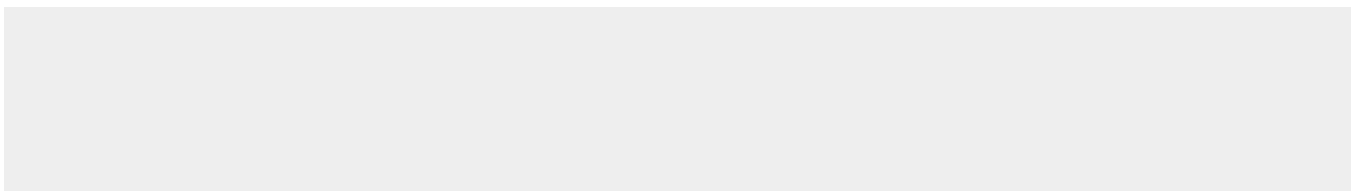
Detected in neutrophils (at protein level).

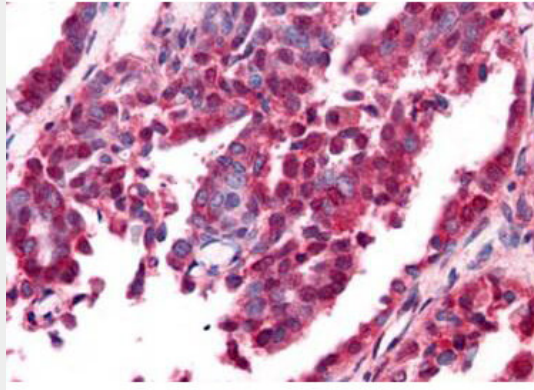
Anti-EGR-1 (RABBIT) Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-EGR-1 (RABBIT) Antibody - Images





Rockland's Affinity Purified anti-EGR-1 antibody was used at a 10 ug/ml to detect nuclear and cytoplasmic signal with low background staining in a variety of tissues including multi-human, multi-brain and multi-cancer slides. Within the multi-tumor block, the antibody showed variable levels of nuclear and cytoplasmic staining between individual tumors, with some tumors showing moderate staining. This image shows EGR-1 staining of human ovarian carcinoma. Tissue was formalin-fixed and paraffin embedded. Personal Communication, Tina Roush, LifeSpanBiosciences, Seattle, WA.

Anti-EGR-1 (RABBIT) Antibody - Background

EGR-1 (also called Early Growth Response protein 1, Krox-24 protein, ZIF268, Nerve growth factor-induced protein A or NGFI-A, Transcription factor ETR103, and Zinc finger protein 225 or AT225) is a transcriptional regulator that recognizes and binds to the DNA sequence 5'-CGCCCCGC-3' (EGR-site). EGR-1 activates the transcription of target genes whose products are required for mitogenesis and differentiation. EGR-1 is a nuclear protein induced by growth factors. Expression has been identified in a variety of cancers.