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EGR1 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1382a

Specification

EGR1 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P18146
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**57.5kDa KDa**

Description
The protein encoded by this gene 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. Studies suggest this is a cancer suppresor gene.

Immunogen
Purified recombinant fragment of human EGR1(aa282-433) expressed in E. Coli.

Formulation
Ascitic fluid containing 0.03% sodium azide.

EGR1 Antibody - 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

Dilution
WB~~1/500 - 1/2000
IHC~~1:200~~1000

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
EGR1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

EGR1 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).

EGR1 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 Cytomety
- Cell Culture

EGR1 Antibody - Images

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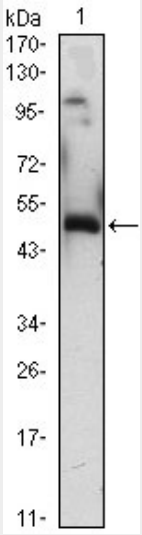


Figure 1: Western blot analysis using EGR1 mouse mAb against EGR1(AA: 282-433)-hIgGFc transfected HEK293 (1)cell lysate.

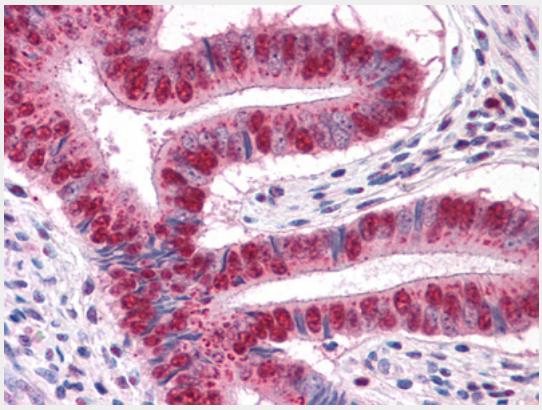


Figure 3: Immunohistochemical analysis of paraffin-embedded human Uterus tissues using MUM1 mouse mAb

EGR1 Antibody - References

1. J Mol Biol. 2009 Nov 20;394(1):29-45. 2. Clin Chim Acta. 2010 Jan;411(1-2):67-71. 3. Gene. 2010 Jan 15;450(1-2):121-7.