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EGR1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1382a

Product Information

Application	WB, E
Primary Accession	P18146
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	8A6
Isotype	IgG1
Calculated MW	57507
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.

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 E~~N/A
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.

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).

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.

Images

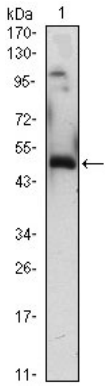

Figure 1: Western blot analysis using EGR1 mouse mAb against EGR1(AA: 282-433)-hIgGFc transfected HEK293 (1)cell lysate.

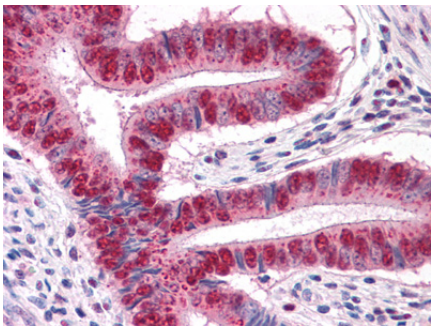

Figure 3: Immunohistochemical analysis of paraffin-embedded human Uterus tissues using MUM1 mouse mAb