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Goat Anti-EGR2 Antibody

Peptide-affinity purified goat antibody

Catalog # AF1356a

Specification

Goat Anti-EGR2 Antibody - Product Information

Application	**IHC, WB**
Primary Accession	P11161
Other Accession	NP_000390, 1959, 13654 (mouse), 114090 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**50302**

Goat Anti-EGR2 Antibody - Additional Information

Gene ID 1959

Other Names
E3 SUMO-protein ligase EGR2, 6.3.2.-, AT591, Early growth response protein 2, EGR-2, Zinc finger protein Krox-20, EGR2, KROX20

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

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
Goat Anti-EGR2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-EGR2 Antibody - Protein Information

Name EGR2

Synonyms KROX20

Function
Sequence-specific DNA-binding transcription factor (PubMed:17717711). Plays a role in hindbrain segmentation by regulating the expression of a subset of homeobox containing genes

and in Schwann cell myelination by regulating the expression of genes involved in the formation and maintenance of myelin (By similarity). Binds to two EGR2- consensus sites EGR2A (5'-CTGTAGGAG-3') and EGR2B (5'-ATGTAGGTG-3') in the HOXB3 enhancer and promotes HOXB3 transcriptional activation (By similarity). Binds to specific DNA sites located in the promoter region of HOXA4, HOXB2 and ERBB2 (By similarity). Regulates hindbrain segmentation by controlling the expression of Hox genes, such as HOXA4, HOXB3 and HOXB2, and thereby specifying odd and even rhombomeres (By similarity). Promotes the expression of HOXB3 in the rhombomere r5 in the hindbrain (By similarity). Regulates myelination in the peripheral nervous system after birth, possibly by regulating the expression of myelin proteins, such as MPZ, and by promoting the differentiation of Schwann cells (By similarity). Involved in the development of the jaw openener musculature, probably by playing a role in its innervation through trigeminal motor neurons (By similarity). May play a role in adipogenesis, possibly by regulating the expression of CEBPB (By similarity).

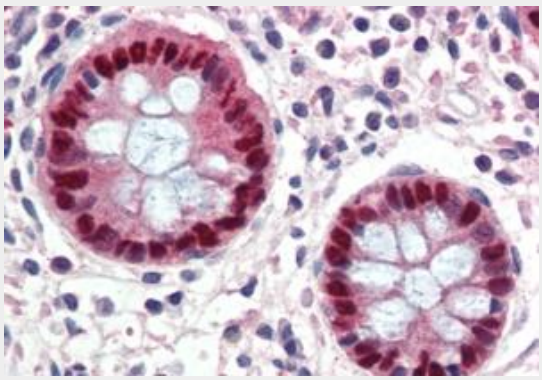
Cellular Location
Nucleus {ECO:0000250|UniProtKB:P08152}.

Goat Anti-EGR2 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

Goat Anti-EGR2 Antibody - Images



AF1356a (3.8 µg/ml) staining of paraffin embedded Human Colon. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

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AF1356a (0.03 µg/ml) staining of HepG2 cell lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-EGR2 Antibody - Background

The protein encoded by this gene is a transcription factor with three tandem C2H2-type zinc fingers. Defects in this gene are associated with Charcot-Marie-Tooth disease type 1D (CMT1D), Charcot-Marie-Tooth disease type 4E (CMT4E), and with Dejerine-Sottas syndrome (DSS). Multiple transcript variants encoding two different isoforms have been found for this gene.

Goat Anti-EGR2 Antibody - References

EGR3 as a potential susceptibility gene for schizophrenia in Korea. Kim SH, et al. Am J Med Genet B Neuropsychiatr Genet, 2010 Aug 4. PMID 20687139.
Evaluation of candidate stromal epithelial cross-talk genes identifies association between risk of serous ovarian cancer and TERT, a cancer susceptibility hot-spot. Johnatty SE, et al. PLoS Genet, 2010 Jul 8. PMID 20628624.
Adult onset Charcot-Marie-Tooth disease type 1D with an Arg381Cys mutation of EGR2. Briani C, et al. Muscle Nerve, 2010 Jun. PMID 20513111.
Biological Pathway-Based Genome-Wide Association Analysis Identified the Vasoactive Intestinal Peptide (VIP) Pathway Important for Obesity. Liu YJ, et al. Obesity (Silver Spring), 2010 Apr 8. PMID 20379146.
Regulatory polymorphisms in EGR2 are associated with susceptibility to systemic lupus erythematosus. Myouzen K, et al. Hum Mol Genet, 2010 Jun 1. PMID 20194224.