

## **Anti-EGR2 Antibody**

**Catalog # ABO11487** 

## **Specification**

# **Anti-EGR2 Antibody - Product Information**

Application WB
Primary Accession P11161
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for E3 SUMO-protein ligase EGR2(EGR2) detection. Tested with WB in Human; Mouse; Rat.

### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## **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

Calculated MW 50302 MW KDa

## **Application Details**

Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat<br>

### **Subcellular Localization**

Nucleus.

### **Protein Name**

E3 SUMO-protein ligase EGR2

### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

## **Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human EGR2(153-168aa TMSQTQPDLDHLYSPP), different from the related rat and mouse sequences by one amino acid.

#### **Purification**

Immunogen affinity purified.

### **Cross Reactivity**



No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

### **Sequence Similarities**

Belongs to the EGR C2H2-type zinc-finger protein family.

## **Anti-EGR2 Antibody - Protein Information**

Name EGR2

Synonyms KROX20

### **Function**

Sequence-specific DNA-binding transcription factor (PubMed:<a

href="http://www.uniprot.org/citations/1771711" target="\_blank">17717711</a>). 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}.

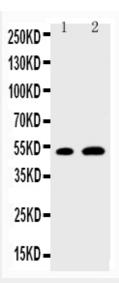
### **Anti-EGR2 Antibody - Protocols**

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

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

## Anti-EGR2 Antibody - Images





Anti-EGR2 antibody, ABO11487, Western blottingLane 1: NIH3T3 Cell LysateLane 2: MCF-7 Cell Lysate

# **Anti-EGR2 Antibody - Background**

Early growth response protein 2, also called EGR2 or E3 SUMO-protein ligase EGR2, is a protein that in humans is encoded by the EGR2 gene. This gene is mapped to 10q21.3. 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). E3 SUMO-protein ligase helping SUMO1 conjugation to its coregulators NAB1 and NAB2, whose sumoylation down-regulates EGR2 own transcriptional activity.