

Anti-EGR2 Antibody

Catalog # ABO11487

Product Information

Application	WB
Primary Accession	P11161
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	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.

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
Application Details	Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat
Subcellular Localization	Nucleus.
Source	Eukaryota
Protein Name	E3 SUMO-protein ligase EGR2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human EGR2(153-168aa TMSQTQPDLHLYSPP), 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 reconstitution, 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.

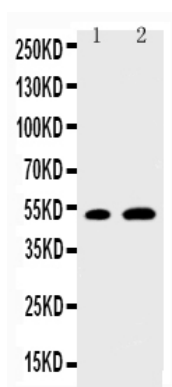
Protein Information

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 opener 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}.

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.

Images



Anti-EGR2 antibody, ABO11487, Western blotting
Lane 1: NIH3T3 Cell Lysate
Lane 2: MCF-7 Cell Lysate