

Product datasheet for **TA336535**

EGR2 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, IHC, WB
Recommended Dilution:	Immunocytochemistry/ Immunofluorescence: 1-5 ug/ml, Western Blot: 2 ug/ml, Immunohistochemistry-Paraffin: 1:200, Immunohistochemistry: 1:200
Reactivity:	Human, Porcine
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	A synthetic peptide made to a portion of human EGR2 (within residues 200-300). [Swiss-Prot# P11161]
Formulation:	PBS, 0.02% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	50 kDa
Gene Name:	early growth response 2
Database Link:	NP_000390 Entrez Gene 1959 Human P11161



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Background:

EGR2 (E3 SUMO-protein ligase EGR2) protein is a member of EGR C2H2-type zinc-finger family and is a sequence-specific DNA-binding transcription factor that binds to two specific DNA sites located in HOXA4 promoter. EGR2 is an E3 SUMO-protein ligase that facilitates SUMO1 conjugation to its coregulators NAB1/NAB2, whose sumoylation down-regulates EGR2's own transcriptional activity. EGR2 interacts with HCFC1, UBC9 and WWP2, and WWP2 mediated ubiquitination of EGR2 results in its proteasomal degradation. EGR2 protein activates several genes which are implicated in the formation and maintenance of myelin, the fatty substance that covers and protects nerve cells. EGR2 is considered a "master" transcription factor that regulates PNS myelination and plays a key role in myelin homeostasis. Besides peripheral nerve myelination, EGR2 plays important role in T cell maturation, hindbrain segmentation, and lipid biosynthesis. Genetic alteration of EGR2 results in a variety of relatively severe demyelinating neuropathies such as congenital hypomyelinating neuropathy (CHN), childhood-onset Dejerine-Sottas neuropathy (DSN), and Charcot-Marie-Tooth disease type 1D (CMT1D).

Synonyms:

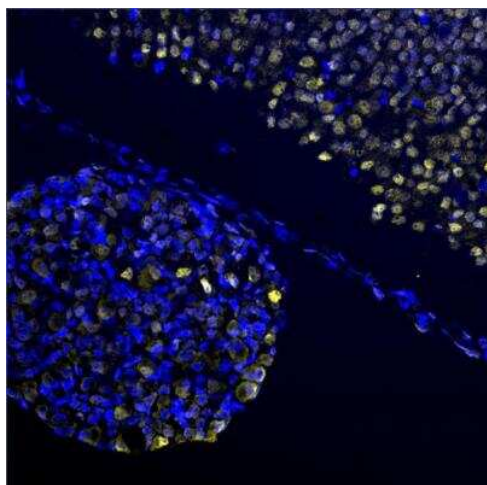
AT591; CMT1D; CMT4E; KROX20

Note:

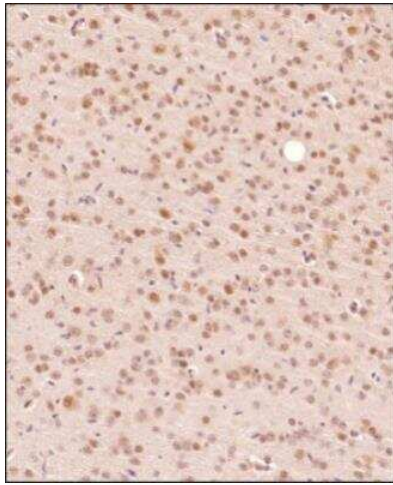
This EGR2 antibody is useful for Immunocytochemistry/Immunofluorescence and Western blot, where a band is seen at ~50 kDa. There is also a strong non-specific band at ~75 kDa. In ICC/IF nuclear staining was observed in Hela cells.

Protein Families:

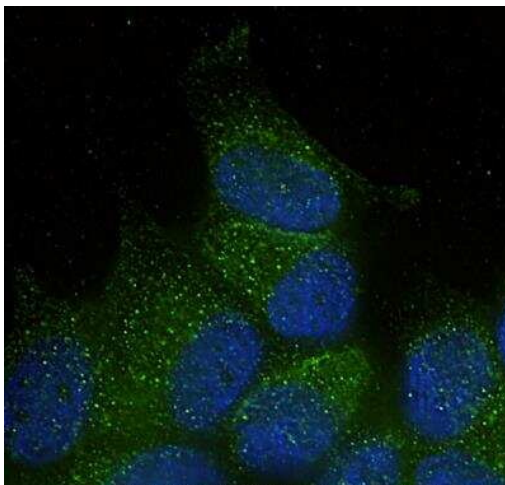
Druggable Genome, Transcription Factors

Product images:

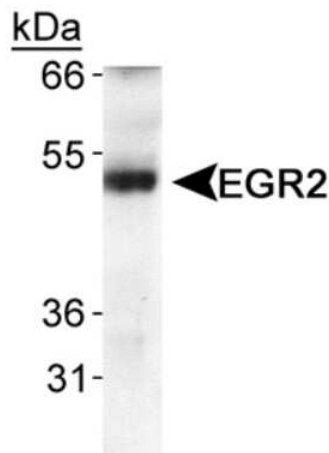
Immunocytochemistry/Immunofluorescence:
EGR2 Antibody TA336535 - EGR2 staining on
E13.5 dorsal root ganglion and neural tube.



Immunohistochemistry-Paraffin: EGR2 Antibody TA336535 - Analysis of a FFPE tissue section of mouse brain using 1:200 dilution of EGR2 antibody. The staining was developed using HRP labeled anti-rabbit secondary antibody and DAB reagent, and nuclei of cells were counter-stained with hematoxylin.



Immunocytochemistry/Immunofluorescence: EGR2 Antibody TA336535 - MCF7 cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.5% Triton X-100 in PBS for 5 minutes. The cells were incubated with anti-EGR2 Antibody TA336535 at 2 ug/ml overnight at 4C and detected with an anti-rabbit Dylight 488 (Green) at a 1:1000 dilution for 60 minutes. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 100X objective and digitally deconvolved.



Western Blot: EGR2 Antibody TA336535 - Detection of EGR2 in human fetal lung tissue using TA336535.