

EGR2 Blocking Peptide (N-term) Synthetic peptide Catalog # BP12101a

Specification

EGR2 Blocking Peptide (N-term) - Product Information

Primary Accession Other Accession

<u>P11161</u> A1XSY8, <u>NP_000390.2</u>, <u>NP_001129649.1</u>

EGR2 Blocking Peptide (N-term) - Additional Information

Gene ID 1959

Other Names E3 SUMO-protein ligase EGR2, 632-, AT591, Early growth response protein 2, EGR-2, Zinc finger protein Krox-20, EGR2, KROX20

Target/Specificity The synthetic peptide sequence is selected from aa 61-74 of HUMAN EGR2

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

EGR2 Blocking Peptide (N-term) - 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}.

EGR2 Blocking Peptide (N-term) - Protocols

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

<u>Blocking Peptides</u>

EGR2 Blocking Peptide (N-term) - Images

EGR2 Blocking Peptide (N-term) - 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.

EGR2 Blocking Peptide (N-term) - References

Kim, S.H., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (7), 1355-1360 (2010) : Myouzen, K., et al. Hum. Mol. Genet. 19(11):2313-2320(2010) Briani, C., et al. Muscle Nerve 41(6):888-889(2010) Liu, Y.J., et al. Obesity (Silver Spring) (2010) In press : Johnatty, S.E., et al. PLoS Genet. 6 (7), E1001016 (2010) :