

Product datasheet for TL510954V

OriGene Technologies, Inc.

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Egr1 Mouse shRNA Lentiviral Particle (Locus ID 13653)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: Egr1 Mouse shRNA Lentiviral Particle (Locus ID 13653)

Locus ID: 13653

Synonyms: A530045N19Rik; egr; Egr-1; ETR103; Krox-1; Krox-24; Krox24; NGF1-A; NGFI-A; NGFIA; TIS8;

Zenk; Zfp-6

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: Egr1 - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: NM 007913, NM 007913.1, NM 007913.2, NM 007913.3, NM 007913.4, NM 007913.5,

BC138613, BC138615

UniProt ID: P08046

Summary: Transcriptional regulator (PubMed:8336701, PubMed:8703054, PubMed:15958557).

Recognizes and binds to the DNA sequence 5'-GCG(T/G)GGGCG-3'(EGR-site) in the promoter

region of target genes (PubMed:8703054, PubMed:15958557, PubMed:2028256, PubMed:8939742). Binds double-stranded target DNA, irrespective of the cytosine

methylation status (By similarity). Regulates the transcription of numerous target genes, and thereby plays an important role in regulating the response to growth factors, DNA damage, and ischemia (PubMed:11100120, PubMed:15958557). Plays a role in the regulation of cell survival, proliferation and cell death (PubMed:15265859, PubMed:15958557). Activates

expression of p53/TP53 and TGFB1, and thereby helps prevent tumor formation

of hepatocytes after partial hepatectomy (PubMed:15265859). Mediates responses to ischemia and hypoxia; regulates the expression of proteins such as IL1B and CXCL2 that are involved in inflammatory processes and development of tissue damage after ischemia (PubMed:11100120). Regulates biosynthesis of luteinizing hormone (LHB) in the pituitary (PubMed:8703054). Regulates the amplitude of the expression rhythms of clock genes:

ARNTL/BMAL1, PER2 and NR1D1 in the liver via the activation of PER1 (clock repressor) transcription (PubMed:26471974). Regulates the rhythmic expression of core-clock gene ARNTL/BMAL1 in the suprachiasmatic nucleus (SCN) (PubMed:29138967).[UniProtKB/Swiss-

Prot Function]





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shRNA Design:

These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).