

## **Product datasheet for MC209623**

## Usf1 (NM\_009480) Mouse Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

Product Name: Usf1 (NM\_009480) Mouse Untagged Clone

Tag: Tag Free Symbol: Usf1

,

Synonyms: bHLHb1; bHLHb11

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >MC209623 representing NM\_009480

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul ACCN: NM\_009480



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com ORIGENE

Insert Size:

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

933 bp

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**RefSeq:** <u>NM 009480.3</u>, <u>NP 033506.1</u>

 RefSeq Size:
 1853 bp

 RefSeq ORF:
 933 bp

 Locus ID:
 22278

 UniProt ID:
 Q61069

 Cytogenetics:
 1 79.4 cM

**Gene Summary:** This protein encoded by this gene is a member of the basic-Helix-Hoop-Helix-Leucine zipper

(bHLH-LZ) family and encodes a protein that can act as a transcription factor. Studies indicate that the basic region interacts with DNA at E-Box motifs, while the helix-loop-helix and leucine zipper domains are involved in dimerization with different partners. This protein is involved in a wide array of biological pathways, including cell cycle regulation, immune response, and responses to ultraviolet radiation. Mice lacking most of the coding exons of this gene often lacked both whiskers and nasal fur, and were prone to epileptic seizures, while mice lacking

both this gene and another family member, Usf2, displayed embryonic lethality

(PMID:9520440). Mutations in the human ortholog of this gene have been associated with Familial Combined Hyperlipidemia (FCHL) in humans. Pseudogenes of this gene are found on chromosome 11 and the X chromosome. Alternative splicing results in multiple transcript

variants encoding different isoforms. [provided by RefSeq, Mar 2015]

Transcript Variant: This variant (3) differs in the 5' UTR compared to variant 1. The 5' terminal exon of this transcript was described in PMID:8938446, and is supported by RNASeq data. Variants 1, 2, and 3 encode the same isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the 5' terminal exon were

described in PMID: 8938446.