

## **Product datasheet for MC209480**

## Supt4a (NM 009296) Mouse Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Supt4a (NM\_009296) Mouse Untagged Clone

Tag: Tag Free Symbol: Supt4a

Synonyms: AL022777; Supt4h; Supt4h1; Supt4h1a

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

Cell Selection: Neomycin

Fully Sequenced ORF: >MC209480 representing NM\_009296

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

**GCCGCGATCGCC** 

ATGGCCCTGGAGACGGTACCAAAGGACCTGCGGCATCTGCGGGCTTGTTTGCTGTGCTCGTTAGTCAAGA CTATAGACCAGTTCGAATATGATGGGTGTGACAATTGCGATGCATACCTACAAATGAAGGGCAACAGAGA GATGGTTTATGACTGCACCAGCTCTTCATTTGATGGAATCATTGCGATGATGAGTCCAGAGGACAGCTGG GTCTCCAAGTGGCAGCGAGTCAGTAACTTTAAGCCAGGTGTATATGCTGTGTCCGTCACTGGTCGCCTGC CCCAAGGAATCGTGCGGGAGCTGAAAAGTCGAGGAGTGGCCTACAAATCCAGAGACACAGCAATAAAGAC

CTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul
ACCN: NM\_009296
Insert Size: 354 bp

**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).



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**Reconstitution Method:** 

- 1. Centrifuge at 5,000xg for 5min.
- 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 009296.1</u>, <u>NP 033322.1</u>

 RefSeq Size:
 693 bp

 RefSeq ORF:
 354 bp

 Locus ID:
 20922

 UniProt ID:
 P63271

 Cytogenetics:
 11 52.2 cM

**Gene Summary:** Component of the DRB sensitivity-inducing factor complex (DSIF complex), which regulates

mRNA processing and transcription elongation by RNA polymerase II. DSIF positively regulates mRNA capping by stimulating the mRNA guanylyltransferase activity of

RNGTT/CAP1A. DSIF also acts cooperatively with the negative elongation factor complex (NELF

complex) to enhance transcriptional pausing at sites proximal to the promoter.

Transcriptional pausing may facilitate the assembly of an elongation competent RNA polymerase II complex. DSIF and NELF promote pausing by inhibition of the transcription elongation factor TFIIS/S-II. TFIIS/S-II binds to RNA polymerase II at transcription pause sites and stimulates the weak intrinsic nuclease activity of the enzyme. Cleavage of blocked transcripts by RNA polymerase II promotes the resumption of transcription from the new 3' terminus and may allow repeated attempts at transcription through natural pause sites (By

similarity).[UniProtKB/Swiss-Prot Function]