

## **Product datasheet for MC226087**

## Chtop (NM\_001293781) Mouse Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

Product Name: Chtop (NM 001293781) Mouse Untagged Clone

Tag: Tag Free
Symbol: Chtop

Synonyms: 2500003M10Rik; Fop; Srag

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

Fully Sequenced ORF: >MC226087 representing NM\_001293781

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

**GCCGCGATCGCC** 

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM\_001293781

**Insert Size:** 534 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).



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OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal

tag.

**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.

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 001293781.1</u>, <u>NP 001280710.1</u>

RefSeq Size: 3580 bp
RefSeq ORF: 534 bp
Locus ID: 66511
UniProt ID: Q9CY57
Cytogenetics: 3 F1

**Gene Summary:** Plays an important role in the ligand-dependent activation of estrogen receptor target genes

(By similarity). May play a role in the silencing of fetal globin genes (PubMed:20688955). Recruits the 5FMC complex to ZNF148, leading to desumoylation of ZNF148 and subsequent transactivation of ZNF148 target genes (PubMed:22872859). Required for the tumorigenicity of glioblastoma cells. Binds to 5-hydroxymethylcytosine (5hmC) and associates with the methylosome complex containing PRMT1, PRMT5, MEP50 and ERH. The CHTOP-methylosome

complex associated with 5hmC methylates H4R3 and transactivates genes involved in

glioblastomagenesis (PubMed:25284789).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (7) differs in the 5' UTR and has multiple differences in the coding region, but maintains the reading frame compared to variant 1. One of these

differences results in translation initiation at a downstream start codon compared to variant

1. The encoded isoform (7) has a shorter N-terminus compared to isoform 1.