

## **Product datasheet for MC226098**

## Chtop (NM\_001293780) Mouse Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Chtop (NM\_001293780) 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: >MC226098 representing NM\_001293780

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGAGATCTGCC

GCCGCGATCGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM\_001293780

**Insert Size:** 537 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 001293780.1</u>, <u>NP 001280709.1</u>

RefSeq Size: 3583 bp
RefSeq ORF: 537 bp
Locus ID: 66511
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 (6) 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 (6) has a shorter N-terminus compared to isoform 1. Sequence Note:

The RefSeq transcript and protein were derived from genomic sequence to make the

sequence consistent with the reference genome assembly. The genomic coordinates used for

the transcript record were based on alignments.