

## Product datasheet for MC226281

### Chtop (NM\_001293778) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Chtop (NM\_001293778) 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:** >MC226281 representing NM\_001293778  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCTGCACAGTCAGCGCCGAAAGTTGTGCTAAAAAGCACCACCAAGATGTCTCTAAATGAGCGCTTTA  
 CTAATATGCTGAAGAACAACAGCCGATGCCAGTGAATATTCGGGCTTCGATGCAGCAGCAGCAGCAGT  
 AGCCAGTCCAGAAACAGAAGACTGGCCAGCAGATGGAGAATAGACCCTCTGTCCAGGCAGCATTAAAA  
 CTTAAGCAGAAGAGCTTAAAGCAGCGCCTGGGTAAAGATAATATCCAGGCACGGTTAGGCCGACCCATAG  
 GTGCCCTGGCCAGGGGAGCAATTGGAGGAAGAGGCTACCCATAATCCAGAGAGGCTTGCCCGAGGAGG  
 ACTACGTGGGGGACGTGCTACCAGAACCCTGCTTAGGGGTGGGATGTCGCTCCGAGGTCCGGGTATGATA  
 GGTCCGGGAAGAGGGGGCTTTGGAGGCAGAGGCCGAGGTTCGTGGCCGAGGGAGAGGTGCCCTCACTCGCC  
 CTGTATTGACCAAGGAGCAGCTGGACAACCAATTGGATGCATACATGTCGAAAACAAAGGACACCTGGA  
 TGCTGAATTGGATGCCTACATGGCACAGACAGATCCTGAAACCAATGAT**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001293778  
**Insert Size:** 612 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).



<b>OTI Annotation:</b>	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_001293778.1</a></u> , <u><a href="#">NP_001280707.1</a></u>
<b>RefSeq Size:</b>	2300 bp
<b>RefSeq ORF:</b>	612 bp
<b>Locus ID:</b>	66511
<b>UniProt ID:</b>	<u><a href="#">Q9CY57</a></u>
<b>Cytogenetics:</b>	3 F1
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (4) lacks an in-frame exon in the 3' coding region compared to variant 1. The encoded isoform (4) is shorter than isoform 1.</p>