

Product datasheet for MR228309

Chtop (NM_001293780) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Chtop (NM_001293780) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Chtop
Synonyms: 2500003M10Rik; Fop; Srag
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR228309 representing NM_001293780
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCTGAAGAACAACAGCCGATGCCAGTGAATATTCGGCTTCGATGCAGCAGCAGCAGCAGCTAGCCA
 GTGCCAGAAACAGAAGACTGGCCAGCAGATGGAGAATAGACCCTCTGTCCAGGCAGCATTAAAACCTAA
 GCAGAAGAGCTTAAAGCAGCGCCTGGGTAAAGTAATATCCAGGCACGGTTAGCCGACCCATAGGTGCC
 CTGGCCAGGGGAGCAATTGGAGGAAGAGGCCTACCCATAATCCAGAGAGGCTTGCCCGAGGAGGACTAC
 GTGGGGGACGTGCTACCAGAACCCTGCTTAGGGGTGGGATGTCGCTCCGAGGTCGGGGTATGATAGGTGCG
 GGAAGAGGGGGCTTTGGAGGCAGAGGCCGAGGTCGTGGCCGAGGGAGAGGTGCCCTCACTCGCCCTGTA
 TTGACCAAGGAGCAGCTGGACAACCAATTGGATGCATACATGTCGAAAACAAAGGACACCTGGATGCTG
 AATTGGATGCCTACATGGCACAGACAGATCCTGAAACCAATGAT

ACGCGTACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR228309 representing NM_001293780
 Red=Cloning site Green=Tags(s)

MLKNKQMPVNI RASMQQQQLASARNRRLAQQMENRPSVQAALKLKQKSLKQRLGKSNIQARLGRPIGA
 LARGAIGRGLPIIQRLPRGGLRGGTRATRTLLRGGMSLRGRGMIGRGRGGFGGRGRGRGRGALTRPV
 LTKEQLDNQLDAYMSKTKGHLDAELDAYMAQTDPEPND

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

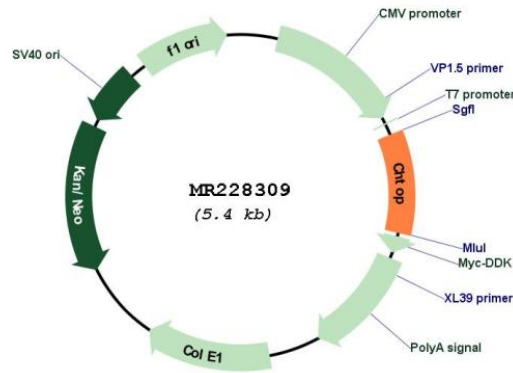
Restriction Sites: SgfI-MluI



Cloning Scheme:



Plasmid Map:



ACCN: NM_001293780

ORF Size: 534 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none">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
MW:	19.8 kDa
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]