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Product datasheet for MR222783

Chtop (NM_023215) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Chtop (NM_023215) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Chtop
Synonyms:	2500003M10Rik; Fop; Srag
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR222783 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGCTGAAGAACAAACAGCCGATGCCAGTGAATATTCGGGCTTCGATGCAGCAGCAGCAGCTAGCCA GTGCCAGAAACAGAAGACTGGCCCAGCAGATGGAGAATAGACCCTCTGTCCAGGCAGCATTAAAACTTAA GCAGAAGAGCTTAAAGCAGCGCCTGGGTAAGAGTAATATCCAGGCACGGTTAGGCCGACCCATAGGTGCC CTGGCCAGGGGAGCAATTGGAGGAAGAGGCCTACCCATAATCCAGAGAGGCTTGCCCCGAGGAGGACTAC GTGGGGGACGTGCTACCAGAACCCTGCTTAGGGGTGGGATGTCGCTCCGAGGTCAAAACCTGCTCCGAGG TGGACGAGCCGTAGCTCCCCGAATGGGCTTAAGAAGAGGTGGTGTTCGAGGTCGTGGAGGTCCTGGGAGA GGGGGCCTAGGGCGTGGAGCTATGGGTCGTGGCGGAATCGGTGGTAGAGGTCGGGGTATGATAGGTCGGG GAAGAGGGGGCTTTGGAGGCAGAGGCCGAGGTCGTGGCCGAGGGAGAGGTGCCCTCACTCGCCCTGTATT GACCAAGGAGCAGCTGGACAACCAATTGGATGCATACATGTCGAAAACTAAAGGACACCTGGATGCTGAA TTGGATGCCTACATGGCACAGACAGATCCTGAAACCAATGAT ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

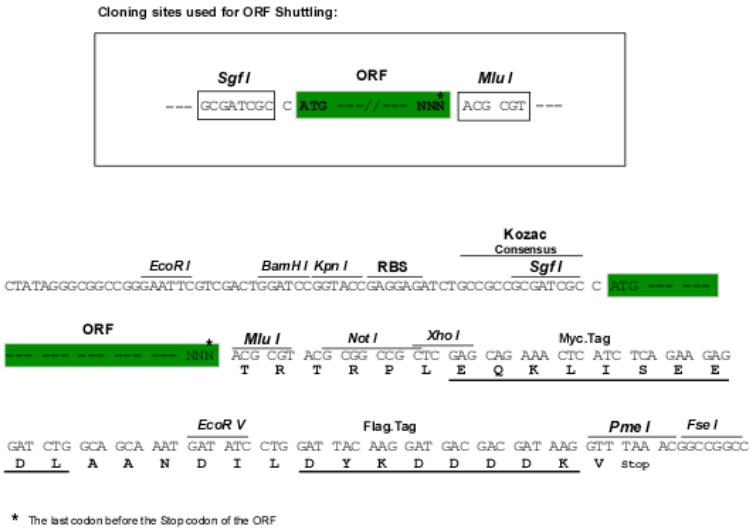
>MR222783 protein sequence
Red=Cloning site Green=Tags(s)

MLKNKQPMPVNIRASMQQQQQLASARNRRLAQQMENRPSVQAALKLKQKSLKQRLGKSNIQARLGRPIGA
LARGAIGGRGLPIIQRGLPRGGLRGGRATRTLLRGGMSLRGQNLLRGGRAVAPRMGLRRGGVRGRGGPGR
GGLGRGAMGRGGIGGRGRGMIGRGRGGFGGRGRGRGRGRGALTRPVLTKEQLDNQLDAYMSKTKGHLDAE
LDAYMAQTDPETND

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_023215

ORF Size: 675 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: 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: NM_023215.6, NP_075704.2

RefSeq Size: 3721 bp

RefSeq ORF: 675 bp

Locus ID: 66511

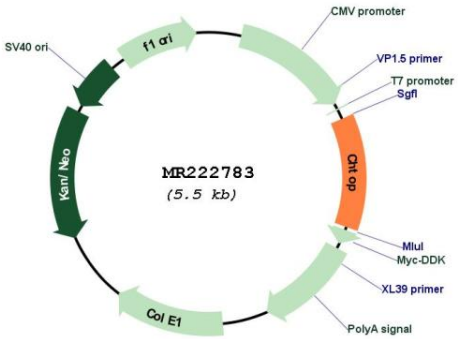
UniProt ID: Q9CY57

Cytogenetics: 3 F1

MW: 23.8 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]

Product images:



Circular map for MR222783