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Product datasheet for RC222491

TMC2 (NM_080751) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TMC2 (NM_080751) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TMC2
Synonyms:	C20orf145
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC222491 representing NM_080751
Red=Cloning site Blue=ORF Green=Tags(s)

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CTCCACACACAGGTGACAGGCTGGGAAGGAGATCCTCAAGCAAGCGGGCTCTCAAAGCCGAGGGGACCCC
AGGCAGGCGCGGAGCTCAGCGAAGCCAGAAGGAGCGCGCCGGGGGCAGCCCAAGCCCGGGGTCTCCCCGG
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AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC222491 representing NM_080751
Red=Cloning site Green=Tags(s)

MSHQVKGLKEEARGGVKGRVKSGSPHTGDRLGRRSSSKRALKAEGTPGRRGAQRSQKERAGGSPSPGSPR
RKQTGRRRHREELGEQERGEAERTCEGRRKRDERASFQERTAAPKREKEIPRREEKSKRQKKPRSSSLAS
SASGGESLSEEELAQILEQVEEKKKLIATMRSKPWPMAKKLTELREAQEFVEKYEGALGKGKGKQLYAYK
MLMAKKWVKFKRDFDNFKTQCIPWEMKIKDIESHFGSSVASYFIFLRWMYGVNLVLFGLIFGLVIIPEVL
MGMPYGSIPRKTVPRAEEEKAMDFSVLWDFEGYIKYSALFYGYYNNQRTIGWLRYRLPMAYFMVGVSVFG
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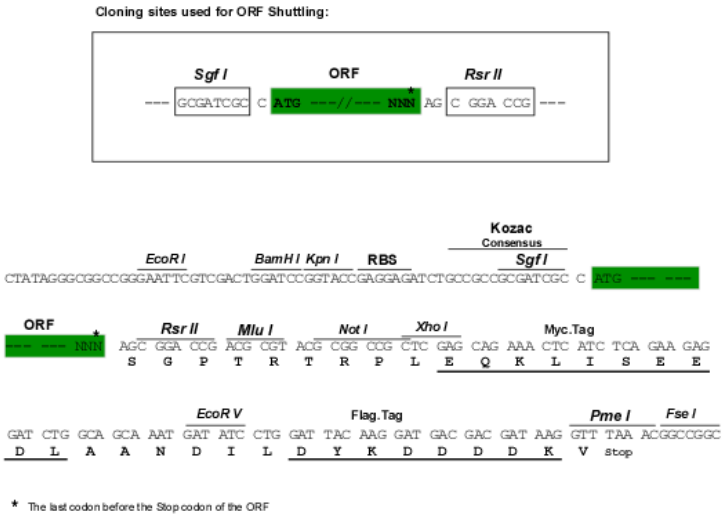
ENIHLTRFLRVLANFLIICCLCGSGYLIYFVVKRSQQFSKMQNVSWYERNEVEIVMSLLGMFCPPLFETI
AALENYHPRTGLKWQLGRIFALFLGNLYTFLLALMDDVHLKLANEETIKNITHWTLFNYYNSSGWNESVP
RPPLHPADVPRGSCWETAVGIEFMRLTVSDMLVTYITILLGDFLRACFVRFMNYCWCWDLEAGFPSYAEF
DISGNVLGLIFNQGMIWMGSFYAPGLVGINVLRLLTSMYFQCWAVMSSNVPHERVFKASRSNNFYMGLLL
LVLFLSLLPVAYTIMSLPPSFDCGPFSGKNRMYDVLQETIENDFPTFLGKIFAFLANPGLIIPAILLMFL
AIYYLNSVSKSLSRANAQLRKKIQVLREVEKSHKSVKGKATARDSEDTPKSSSKNATQLQLTKEETTPPS
ASQSQAMDKKAQGPGTSNSASRTTLPASGHLPISRPPGIGPDSGHAPSQTHPWRSASGKSAQRPPH

SGPTRTRRLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8012_a04.zip

Restriction Sites: SgfI-RsrII

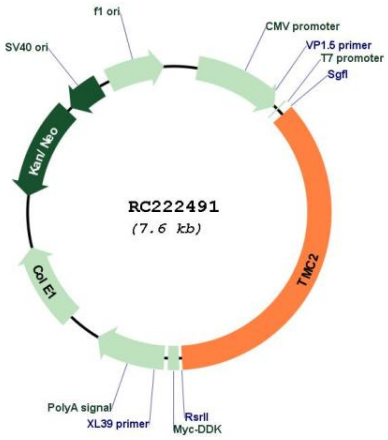
Cloning Scheme:



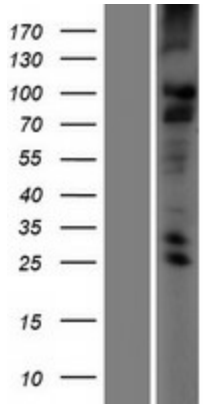
ACCN: NM_080751

ORF Size:	2718 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_080751.2, NP_542789.2
RefSeq Size:	3169 bp
RefSeq ORF:	2721 bp
Locus ID:	117532
UniProt ID:	Q8TDI7
Cytogenetics:	20p13
Protein Families:	Transmembrane
MW:	102.4 kDa
Gene Summary:	This gene encodes a transmembrane protein that is necesssary for mechanotransduction in cochlear hair cells of the inner ear. Mutations in this gene may underlie hereditary disorders of balance and hearing. [provided by RefSeq, Aug 2015]

Product images:



Circular map for RC222491



Western blot validation of overexpression lysate (Cat# [LY409067]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222491 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).