

Product datasheet for **RG207400**

TMEM146 (CATSPERD) (NM_152784) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TMEM146 (CATSPERD) (NM_152784) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CATSPERD
Synonyms:	TMEM146
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>RG207400 representing NM_152784
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTGGTGGCGCTGTGACCATGTGGCTCCGACCCTGGTCACAGCTCAGCTCTGTCTCGCACAG
TGAGGACAGGAAAAGTGTAACTGATACAGGACGTTCAAGGGACCGCCTGTATTTTCATCCTACAAC
AACACGCTTGATTAACATCCTTGCAGAAAAATATAGCACTATATCTAGGAAAACAAGTTTTTTCACA
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CCACTCGGTGACACAGCCTTTCCAGCTTTTGTATTTCCAGAAGTGCCTCGTGAATATCCAGGCGCTTCTCA
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ACCATCTTTAGCATCTACGTGTATGGAGCATTCCCGTGCAGCTGGTCTCTGCTGGAGTCGTCATCCTAC
TGATCATCTCCAGCATCCTGGGGTCCGTTTGGCTGGCCTACAAGACCCCAAGCTGCTACGCACAGCAGC
CGGCCGAGGATCAAGAAGTGTGCGACACAGCTGTGAGGAGATGCAAGACGGTCTGCCAGTTTCAGGGCC
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AC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

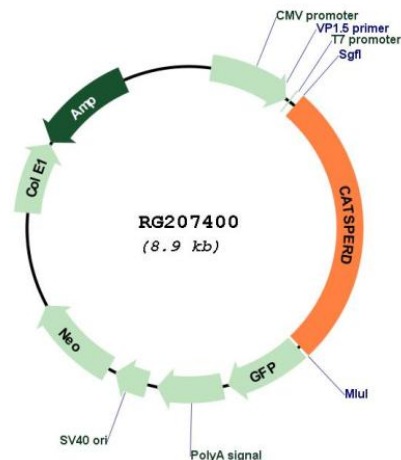
Protein Sequence: >RG207400 representing NM_152784
Red=Cloning site Green=Tags(s)

MLVAAVTMWLRPLVTAQLCRSRTVRTGKVFNLIQDVQGDRLYFHPTTTRLIKHPCEKNIALYL GKQVFFT
MDNFETSLLPFTIPTSMQVGVPEVTSAHFAGSLLLLVVDQKVYIYDYENNSWSMSLGIKHPVTHVSGDNC
CYTGSLFCVHVSNLVFAYFRGDQISQTYIYYSNTGGFSFWKYHYDRQAEIIGSLGGIFHFFSLSQVAMLV
VNQGGKGMFKYSDHPLNRSFGLSFDYNGTLDILIA PGQRGILLWFENSLLFSHNAGQLVDTVRVKKGDQT
LFSSIFEAKITIHNIAVTENELAVITREDNLYYGNL GIVPSSIIKFADQYIWSEVALMFRSPGTLEILT
PLRDTAFPAFDQKCLVNIQALLMPELHV GKCKIEFLTGEFIYRMYTIDMHSQLELTASLIPQPGTSLI
PLVMVSNPHSLGFQATFYENGYTSDGNTKYKLDIFLKQQQHWGRTDSNFTSSLKKATMSTLTVDIANKEI
SCVDIKPLSALISVGCDDLK KIVIQNKVSACSMGILDPLTLQDNYSFIEKEFYDPGFQGGQSSDLHVF
YSYQQLGCPLL VYYDTLWKPVV ELWRKDSFQEV IDAEYV LLEVNGQFSYSYSLTAQSAMCTSQPQNWTM
IKEFGGPF FWNRENYVSCHDPNNAPLRWPDVQYILGGRTANQIIFGHNGFYVYISIVDPYYSYQLE
TIFSIYVYGAFPVQLVSAGVILLI ISSILGSVWLAYKTPKLLRTARGRRIKKCATQLCRRCKTVCQFRA
SATARAGTEPPGRHRTPHGGRSDH

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Plasmid Map:



ACCN: NM_152784

ORF Size: 2394 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_152784.3](#), [NP_689997.3](#)

RefSeq Size: 2528 bp

RefSeq ORF: 2397 bp

Locus ID: 257062

UniProt ID: [Q86XM0](#)

Cytogenetics: 19p13.3

Protein Families: Transmembrane

Gene Summary: Auxiliary component of the CatSper complex, a complex involved in sperm cell hyperactivation. Sperm cell hyperactivation is needed for sperm motility which is essential late in the preparation of sperm for fertilization. Required for CATSPER1 stability before intraflagellar transport and/or incorporation of the CatSper complex channel into the flagellar membrane.[UniProtKB/Swiss-Prot Function]