

## Product datasheet for **RG209404**

### **CATSPER2 (NM\_172095) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CATSPER2 (NM_172095) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CATSPER2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG209404 representing NM\_172095  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCCGCTTACCAACAAGAAGAGCAGATGCAGCTTCCCCGAGCTGATGCCATTCGTTACAGTCTCATCG  
 ATACTTTCTCTCTCATTGAGCATTTGCAAGGCTTGAGCCAAGCTGTGCCGCGGCACACTATCAGGGAGTT  
 ACTTGATCCTTCCCGCCAGAAGAACTTGTATTGGGAGATCAACACCAGCTAGTGCCTTCTCTATAAAG  
 CCTCAGCGTATAGAACAGATTTACATGCCAGAGGCTTTGAGCAGGCTTCATGTGCGCTGCAGTCAGA  
 GGCCACCTCTTTCTTTGTGGCCGGATGGGTCCTTGAGTGTCTCTTTCAAAAACCTTCATCATCTTCT  
 GGTCTTTTGAATACGATCATATTGATGGTTGAAATAGAATTGCTGGAATCCACAAATACAAAATATGG  
 CCATTGAAGCTGACCTTGAGGTGGCAGCTTGGTTTATCTTGCTATTTTCATCTGGAGATCCTTCTTA  
 AGTGGCTATCCAACCTTTCTGTTTTCTGGAAGAGTGCCTGGAATGTCTTGACTTTGTTGTACCATGTT  
 GTCCTGCTTCCGAGGTTGTGGTATTGGTAGGGTAACAGGCCAATCGGTGTGGCTTCAGCTTCTGAGG  
 ATCTGCCGGGTGCTGAGGTCTCTCAAACCTCTGCACAATCCGTCAAATTCAAATATTATTTTGGTCC  
 TGGTCAGGGCCCTCAAGAGCATGACCTTCTTCTGATGTTGCTGCTCATCTTCTTCTACATTTTTGCTGT  
 GACTGGTGTCTACGTCTTCTCAGAGTACACCCGTTACCTCGTCAGGACCTGGAGTACCATGTGTTCTTC  
 TCGGACCTCCCGAATCCCTGGTAACAGTGTTCATTCTTTCACCTTGGATCATTGGTATGCACTGCTTC  
 AGGACGCTGGAAGGTGCCTGAAGTCAGTCGCATCTTCAGCAGCATCTATTTTCATCTTTGGTTGTTGCT  
 TGGCTCCATTATCTTTCGAAGTATCATAGTAGCCATGATGGTTACTAACTTTCAGAATATCAGGAAAGAG  
 CTGAATGAGGAGATGGCGCGTCCGGAGGTTGAGTCAAAGCTGACATGTTCAAGCGGCAGATCATCCAGA  
 GGAGAAAAACATGTACATGAAGCACTGACGTCAAGCCATAGCAAAAATAGAGGACAGAGGAGATGTC  
 ACAAGGAAAGTTGGACTTATCAGAAGTGTCTGAAGTAGAGTCTAATTATGGTCCACTGAAGAGGAT  
 TTAATAACATCTGCATCAAAAACAGAAGAGACCTTGTCAAAAAGAGAGAGTACCAGTCTTCTCTCTGTG  
 TCTCTCCACATCTTCTCTTCT  
 CTGGGAGACTCTGTGCACGAAAATCTGCCGGGCTAATGAAAATGGATCAGGATGACCGTGTGGCC  
 AGAGACTACTCTCCGATATTTTGAAGTGTAGAAAAGCTTCAGTATAACCTAGAGAACGTAAGAAGT  
 TACAAGAGTTGCAGTGCAGGCACTGATGAACCTGGAAGACAAG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG209404 representing NM\_172095  
 Red=Cloning site Green=Tags(s)

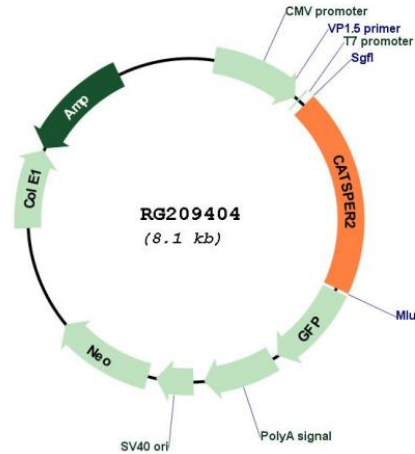
MAAYQEEQMLPRADAIRSRLIDTFSLIEHLQGLSQAVPRHTIRELLDPSRQKKLVLDQHQLVRFSLK  
 PQRIEQISHAQRLLSRLHVRCSQRPLSLWAGWVLECPKFNFIIFLVFLNTIILMVEIELLESTNTKLW  
 PLKLTLEVAWFILLIFILEILLKWL SNFSVFWKSAWNVDFVVTML SLLPEVVVLVGVGTGQSVWLQLLR  
 ICRVLRSLKLLAQFRQIQIILVLRALKSMTFLLMLLLIFFYIFAVTGVVVFSEYTRSPRQDLEYHVFF  
 SDLPNSLVTVFILFTLDHWYALLQDVWKVPEVSRIFSSYIFILWLLLSIIFRSIIVAMVMTNFQNRKE  
 LNEEMARREVQLKADMFQRQIQRRKNMSHEAL TSSHSKIEDRGASQQRESLDLSEVSEVESNYGATEED  
 LITSASKTEETLSKKREYQSSSCVSSTSSSYSSSESSESRFSESIGRLDWETLVHENLPLMEMDQDDRVWP  
 RDSLFRYFELLEKLQYNLEERKKLQEFVQALMNLEDK

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI



**Plasmid Map:**


<b>ACCN:</b>	NM_172095
<b>ORF Size:</b>	1590 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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).

**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\\_172095.1](#), [NP\\_742093.1](#)

**RefSeq Size:** 1948 bp

**RefSeq ORF:** 1593 bp

**Locus ID:** 117155

**UniProt ID:** [Q96P56](#)

**Cytogenetics:** 15q15.3

**Protein Families:** Druggable Genome, Ion Channels: Other, Transmembrane

**Gene Summary:** This gene encodes a member of a family of cation channel proteins that localize to the flagellum of spermatozoa. Defects at this locus causes male infertility. Alternatively spliced transcript variants have been observed at this locus. Readthrough transcription originates upstream of this locus in diphosphoinositol pentakisphosphate kinase 1 pseudogene 1 and is represented by GeneID:110006325. Related pseudogenes are found next to this locus on chromosome 15 and on chromosome 5. [provided by RefSeq, Mar 2017]