

Product datasheet for **RR204174**

Catsper2 (NM_001012220) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Catsper2 (NM_001012220) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Catsper2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR204174 representing NM_001012220
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCACATGAACGAGGACATTTACAGCTGCCAGAGCTGATGCTATCCGTTCAAAGCTCATTGACACTT
 TCTCGCTCATAGAGCATTTCAGGGCTTGAGCCAAGCTGTACCAAGGCACACTCTCCGGGAGATACTTGA
 TCCGGCTTGTCAGAAGAACTCATGTTAGGAGATCAGGAGCAGCTAGTGCCTTCTCCATAAGGGCGCGG
 CGTATGGGGCACATTACGCATGCCAGCGGTTGCTGAGCAGACTTCGAGTGCCTGCGGTGGAAGACCAC
 CTCTTCTTGTGGGCTGGATGGTTCTTGACAGTTCTATCTTCTCGAATTTTCATCATCTCCCTCATCTT
 TCTGAATACCTTTGTGCTGATGGTCGAAATAGAATTGATGAACCCACAAATACGAGTCTGTGGCCATTG
 AAGCTGGCTTTGGAGGTGACAGATTGGTTTATCTTGCTTAGCTTCATTGTAGAGATCCTTCTAATGTGGT
 TGGCCAGCTTTTTCTTCTGGAAGAATGCCTGGAGTGTCTTTGACTTTGTGGTTACCATGTTGTCTCT
 GCTTCTGAGTTTGTGGTCTGATAGGCGTCTCTGCGGACTCTGTGTGGTCCAAGTCTAAGGGTCTCT
 CGGGTGCTGAGGTCTCTCAAAGTGTGACGATTCCCTCAAATTAAGTTATTCTTTGGCTCTCGTCA
 GGGCCCTGAAGAGCATGACATTCCTGTTGATGTTGCTGCTTATCTTCTTCTACGTCTTCGCTGTGGCCGG
 TGTCTACTTCTTCAAAGAATATCCCGTTCAACTATCGAGAATCTGGAGTACAACATGTTCTTCTCGGAC
 CTACTAAATCCCTGGTACAGTGTTCATCCTCTTACCTTGGATCATTGGTATGCAGTACTTCAGGACG
 TCTGGAAGGTGCCAGAAGCTAGCCGTGTCTTAGCAGCATCTATGTATCCTTTGGTTGTTGCTTGGTTC
 CATTATCTTTCGAAACATCATAGTAGCCATGATGGTTACTAATTTTTCAGAATATCCGAAATGAGCTGCAT
 GAGGAGATGACTCACCTGGAGTTCAGTATAAGGCTGACATATCAAGCGACGGATTATCCAGAGGAGAC
 AACAATCTGAGTCACTAAGAGGAACAGTCAAGGAAAGGCTCCGAAGACATAACAGAAACTTCCGAGGC
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 GAGAAAAGCGATGAAGAGAAAAACGATGAAGAGAAAAGTGTGAAGAGGAAAACGATGAAGAGAAAAGTG
 ATGTAGAGAAAAGCGATGAAGAGAAAAACGATGAAGAGAAAAGGTATACCGAGAAAAGTGTATTCCGGAAG
 AACCTTTGTGGAGAGAAGTTATGCTGAGAGAAGCTTTGCTGAAAAGGCTGAAAAAGAAAAAGTACAAAA
 GAGTTGAAAGAAAAGGCTACCCGGTCTCTCCCAACTCTTCCATCCCATGATGAAGCCTTTGCAGCCG
 ATGATACTTACCTTGAACCTGGACTGGGAGACTCTTGTGCATGAGAACCTGCCTGGGCTAATGGATAT
 GGATCAGGATGACCGTGTGTTGGCCAGAGATTCGCTTTCCGATATTTGAGTACTGAAAAGCCTT
 CAGTATAACCTAGAGGAGCGCAAGAGTTGCAAGAATTTGCAGTCAAGCACTGATGAATTTGAAGACA
 AG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR204174 representing NM_001012220
 Red=Cloning site Green=Tags(s)

MAHERGHLQLPRADAIRSKLIDTFSLIEHLQGLSQA VPRHTLREILD PACQK KLM LGDQEQLVRF SIRAR
 RMGHITHAQRLLSRLRVRCGRPPLSLWAGWVLDSSIFS NFIISLIFLNTFVLMVEIELMNSTNTSLWPL
 KLALEVTDWFILLSFIVEILLMWLASFFLFWKNAWSVDFVVTMLSLLEPFVVLIGVSADSVWLQLLRVS
 RVLRLSLKLFARFPQIKVILLALVRALKSMTFLLMLLLIFFYVFAVAGVYFFKEYSRSTIENLEYNMFFSD
 LLNSLVTVFILFTLDHWYAVLQDVWKVPEASRVFSSIIYVILWLLGSIIFRNIIIVAMMVTNFNQIRNELH
 EEMTHLEVQYKADIFKRRIIQRQQSESLRGTSSQGVSEIDITETSEATDEEKSEAESEEEKSEEEKSDV
 EKSDEEKNDEEKSDDEENDEEKSDVEKSDEEKNDEEKGYTEKVVSGRTFVERSYAERSFAGKAENEKVQK
 ELKEKAYPGSPPNSSSHDEAFAADDTYLENLDWETLVHENLPLMDMDQDDRVVWPRDSLFRYFELLESL
 QYNLEERKRLQEFVQALMNFEDK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

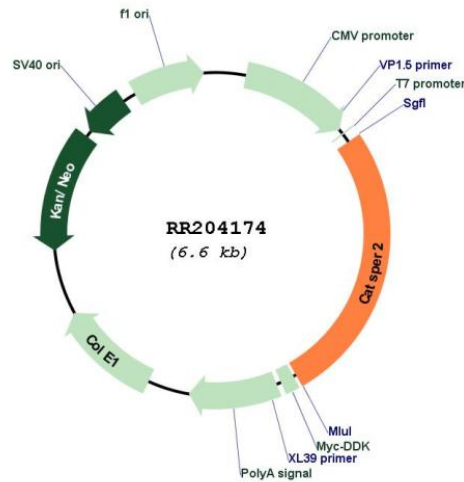
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN:

NM_001012220

ORF Size:	1752 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:	NM_001012220.1 , NP_001012220.1
RefSeq Size:	2234 bp
RefSeq ORF:	1755 bp
Locus ID:	366174
UniProt ID:	Q6AXP6
Cytogenetics:	3q35
MW:	68.3 kDa
Gene Summary:	Voltage-gated calcium channel that plays a central role in sperm cell hyperactivation. Controls calcium entry to mediate the hyperactivated motility, a step needed for sperm motility which is essential late in the preparation of sperm for fertilization. Activated by intracellular alkalinization (By similarity).[UniProtKB/Swiss-Prot Function]