

Product datasheet for **MG224271**

Catsper1 (NM_139301) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Catsper1 (NM_139301) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Catsper1
Synonyms:	Catsper; KSper
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>MG224271 representing NM_139301
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATCAATCTTCAAGGAGGGACGAGTCTTACCATGAGACACACCCCGTAGCTTAGACCCAAGCCATC
AATCCCACCCCAACCCCAACCCCAACCCCAACCCCTGCATAGGCCAAACCAAGGTGGCGTCTATTACGATTC
TCCTCAGCATGGGATGTTCCAACAACCATACCAACAGCATGGTGGTTCCATCAACAAAATGAATTGCAG
CATTTGCGTGAGTTCTCAGACTCCCATGACAATGCTTTCTCCCATCATTCTATCAGCAGGACAGGGCTG
GTGTCTCTACCTTACCTAATAACATCTCTCAGCCTTATGGTGGATCGCACCCCTTGCTGAGTCCCAGCA
CTCTGGTGGACCCAGAGTGGACCTCGTATTGACCCGAATCATCATCCCCACCAAGATGACCCCATAGA
CCCAGTGAACCTTTGTCACCCCTCCTCTACTGGCAGCCACCAAGGGACAACCCATCAACAATACCATG
AGAGGTCTCACCATCTTAACCCCAAGCAGAACAGAGATCATGCAGACACCATTTCCTATCGCTCCAGTAC
GCGGTTCTATCGCTCCCATGCGCCGTTCCAGTCGCCAGGAAAGACCTCATCTCCACGCTGATCACCATCAT
GAGGGCCATCATGCCATTCTCACCATGGTGAACATCCCCACCACAAGGACAACGGCACTATCACGGAG
ATCATATGCATCACCATATCCATCATCGCTCCCAAGTGCTCCCAACTCTCACACAAGTCTCACAGCAC
ACTTGCCACCTCTCCATCTCATGTGGGATCGAAAAGCACAGCCAGTGGGGCTCGGTACACCTTTGGAGCT
CGCTCTCAAATTTTCGGCAAAGCTCAGTCCAGGGAGAGCTTGAGAGAATCAGCCTCTTTGAGTGAAGGGG
AGGATCACGTTTCAGAAACGAAAAAGGCCAGAGGGCCCAAGAAGGCACACACCGGGAATATCTTCCA
ATTGCTATGGGAAAAAATAGCCATCTCCTTTTGGGTCTTCAGCAAATGATATTGCACTGACCCAGTCC
CTGGGCTTTGAGACCTTTATCTTCATCGTGGTCTGCCTCAACACAGTTCATCCTTTGGCCAGACTTTCA
CTGAGCTAGAGATCCGAGGTGAATGGTACTTTCATGGTCTTGACTCCATCTTCTCCATCTATGTACT
AGAAGCAGTCCTCAAGCTAATTGCCCTGGGCCTGGAGTATTTTTATGACCCATGGAACAACCTGGACTTC
TTCATCATGGTTCATGGCAGTGGTGGACTTTGTGCTCCTTCAGATAAACTCGCTCTCATATTCATTCTACA
ACCACAGCCTGTTCCGGATTCTCAAAGTCTTCAAAGTATGCGGGCCCTGAGGGCCATCCGGGTTCTTCG
GAGGCTCAGCATCCTGACCAGCCTCCACGAAGTGGCCGGGACTCTGAGTGGATCTTACCATCCATCAG
GCCATCCTCACCCTCATGTTTACCTGCCTCTTCTCTTCTGTGGTTCTCCGAGCACTGTTTCAGGACT
CAGACCCCAAGCGCTTCAGAACATCTTACCACACTCTTACCCTGTTCCACATGCTCACCTGGACGA
CTGGTCCCTCATCTACATAGACAACAGGGCCCAAGGCGCCTGGTACATCATACCGATCCTCATGATTAC
ATTGTCATCCAGTACTTCATCTTCTCAACCTGGTATTGCTGTCTGGTAGATAACTTCCAGATGGCGT
TGCTCAAAGGCCTAGAGAAAGTGAAGCTGGAGCAAGCTGCCCGGTCCATGAGAAGTTGTTGGATGACTC
TCTGACAGATCTCAACAAGCAGACGCCAATGCACAAATGACCGAGGAGGCCTTGAAGATGCAGCTTATT
GAGGGAATGTTTGGCAACATGACAGTGAAGCAGCGGTGCTCCACTTCCAGTTTCCAGTTGGTGGCAG
CGGTAGAACAGCATCAACAGAAGTTTCGTTCCCAAGCGTACGTCATCGATGAGCTTGTGGACATGGCATT
TGAGGCTGGAGACGACGACTACGGGAAG

ACGCGTACGCGGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG224271 representing NM_139301
 Red=Cloning site Green=Tags(s)

MDQSSRRDESYHETHPGSLDPSHQSHPHPHPTLHRPNQGGVYDSPQHGMFQQPYQQHGGFHQQNELQ
 HLREFSDSHDNAF SHHSYQDRAGVSTLPNNISHAYGGSHPLAESQHSGGPQSGPRIDPNHHPHQDDPHR
 PSEPLSHPSSSTGSHQGTTHQQYHERSHHLNPQQNRDHADTISYRSSTRFYRSHAPFSRQERPHLHADHHH
 EGHHAHSHHGEHPHHKEQRHYHGDHMHMHHIHHRSPSASQLSHKSHSTLATSPSHVGSKSTASGARYTFGA
 RSQIFGKAQSRESLRESASLSEGEDHVQKRKKAQRAHKAHTGNIFQLLWEKISHLLLGLQQMILSLTQS
 LGFETFIFIVVCLNTVILVAQTFTELEIRGEWYFVLDLSDIFLSIYVLEAVLKLIALGLEFYDPWNNLDF
 FIMVMAVLDVFLVQINLSYSFYNHSLFRILKVKFSMRALRAIRVLRRLSILTSLHEVAGTSLGSLPSIT
 AILTLMFTCLFLFSVVLRALFQSDPKRFQNIFFTLFTLFTMLTDDWSLIYIDNRAQGAWYIIPILMIY
 IVIQYFIFLNLVIAVLVDNFQMALLKGLEKVKLEQAARVHEKLLDDSLTDLNKADANAQMTEEALKMQLI
 EGMFGNMTVKQRVLHFQFLQLVAAVEQHQQKFRSQAYVIDELVDMAFEAGDDDYGK

TRTRPLE - GFP Tag - V

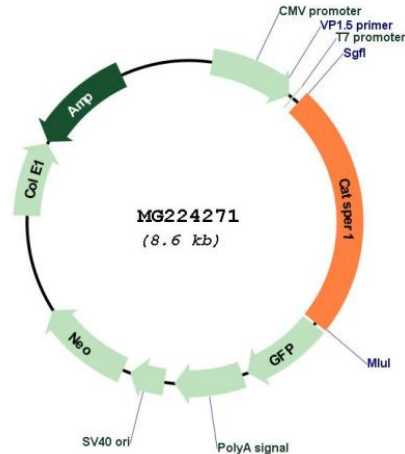
Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: NM_139301

ORF Size: 2058 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_139301.3](#)

RefSeq Size: 2061 bp

RefSeq ORF: 2061 bp

Locus ID: 225865

UniProt ID: [Q91ZR5](#)

Cytogenetics: 19 A

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.[UniProtKB/Swiss-Prot Function]