

## Product datasheet for **MR218221**

### Catsper4 (NM\_177866) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Catsper4 (NM_177866) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Catsper4
Synonyms:	4933412L05
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR218221 representing NM\_177866  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCTGAAAAACACAAGTGGTGGCAGCAGGTGGAGAACATCGACATCACACACCTGGGCCCTAAGAGAA  
 AAGCCTATGAACTCCTGGGTCGGCATGAGGAGCAAGTGCTCATCAACCGCAGAGATGTCATGGAGAAGAA  
 GGATGCCTGGGATGTACAGGAATTCATCACTCAATGTATATCAAGCAGTTGCTCCGCCATCCGGCCTTC  
 CAGCTGCTGCTGGCCTTTCTGCTGCTGTCCAACGCTATCACCATTGCCCTTCGCACCAACTTTATCTCG  
 GTCAGAAACATTACGAGCTATTCTCGACCATAGATGACATTGTGTTGACGATCCTTATCTGCGAGGTTCT  
 GCTTGGTTGGCTTAACGGCTTCTGGATTTCTGGAAGGATGGCTGGAATATCCTCAACTTCGCAATTGTC  
 TTTATCTGTTTATGGGGTTCTCATAAAACAACCTTGACATGGTTGCCATCACCTACCCTCTCAGGGTGC  
 TCCGGCTGGTGCATGTGTATGGCGGTGAACCCCTGGCCAGAATCATCAAGGTTATCCTGCAGTCGAT  
 GCCAGACTTGGCTAATGTCATGGCTCTCATCTTCTTTCATGCTGGTATTCTCTGTGTTGGGGTCAGC  
 CTCTTCGGTGCATTTGTGCCAAGCATTCCAGAACATGGGGGTTGCCCTGTACACGCTCTTCATCTGCA  
 TCACTCAGGATGGATGGCTGGACATCTACACTGACTTCCAGATGGATGAAGAGAGTACGCGATGGAGGT  
 CGGGGGCGCCATCTACTTTGCCGTCTTTATCACCTCGGTGCCTTCATTGGTCTCAAATTGTTCTGTCGTC  
 GTGGTGACCACAAACCTGGAACAAATGATGAAGACCGGCGAGGAAGAGGGACACCTGAACATAAAGTTTA  
 CTGAGACAGAAGAGGATGAGGACTGGACCGACGAGCTGCCACTGGTGCATTGTACAGAGGCCCGCAAGGA  
 TACTTCCACTGTCCCAAGGAACCACTGGTTGGGGCCCCCTGAGTAACCTCACAGAAAAGACCTGCGAT  
 AACTTCTGCTTGGTGTGAAGCAATACAGGAGAACTTGATGGAGTACAAAGAGATCCGAGAGGAACTCA  
 ACATGATCGTGGAGGAAGTGTCCATCCGTTCAACCAGGAGCAGAAAATGTGATCCTACACAAGTA  
 TACCTCCAAAAGCGCACCTTCTAAGCGAGCCCGCAGAAGGGGCTAACAGCAAGACTTGATCACTGCG  
 CTGGTCAGCAGGAAAAGGTGTCTGATTCTAACATAAACATGGTTAACAAACACAAGTTCAGCCAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR218221 representing NM\_177866  
 Red=Cloning site Green=Tags(s)

MSEKHKWWQVENIDITHLGPKRKAYELLGRHEEQVLINRRDVMKKDAWDVQEFITQMYIKQLLRHPAF  
 QLLLAFLLLSNAITIALRTNSYLGQKHYELFSTIDDIVLTILICEVLLGWLNGFWIFWKDGNILNFAIV  
 FILFMGFFIKQLDMVAITYPLRVLRVHVCMAVEPLARIKVVILQSMPDLANVMALILFFMLVFSVFGVT  
 LFGAFVPKHFQNMGVALYTLFICITQDGLDIYDFQMDEREYAMEVGGAIYFAVITLGAFIGLNLFFV  
 VVTTNLEQMMKTGEEEGHLNIKFTETEDEDWDELPLVHCTEARKDTSTVPKEPLVGGPLSNLTKTCD  
 NFCLVLEAIQENLMEYKEIREELNMIVEEVSSIRFNQEQQNVILHKYTSKATFLSEPPEGANKQDLITA  
 LVSREKVSNSINMVKHKFHS

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9017\\_f10.zip](https://cdn.origene.com/chromatograms/mm9017_f10.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_177866

**ORF Size:** 1326 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\\_177866.4](#), [NP\\_808534.1](#)

**RefSeq Size:** 1730 bp

**RefSeq ORF:** 1329 bp

**Locus ID:** 329954

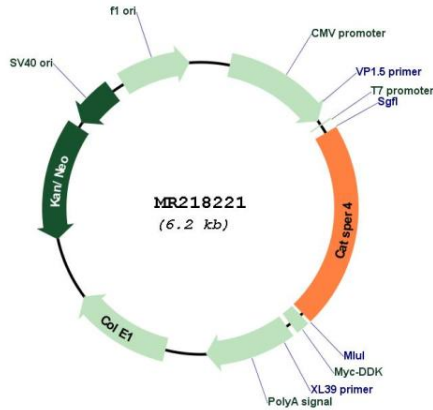
**UniProt ID:** [Q8BVN3](#)

**Cytogenetics:** 4 D3

**MW:** 51.6 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.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR218221