

## Product datasheet for **MG218221**

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

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | Catsper4 (NM_177866) Mouse Tagged ORF Clone                                 |
| Tag:                      | TurboGFP  |
| Symbol:                   | Catsper4  |
| Synonyms:                 | 4933412L05  |
| Mammalian Cell Selection: | Neomycin  |
| Vector:                   | pCMV6-AC-GFP (PS100010)   |
| E. coli Selection:        | Ampicillin (100 ug/mL)  |
| ORF Nucleotide Sequence:  | >MG218221 representing NM_177866<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCTGAAAAACACAAGTGGTGGCAGCAGGTGGAGAACATCGACATCACACACCTGGGCCCTAAGAGAA  
AAGCCTATGAACCTCTGGGTCGGCATGAGGAGCAAGTGTCTCATCAACCGCAGAGATGTCATGGAGAAGAA  
GGATGCCTGGGATGTACAGGAATTCATCACTCAAATGTATATCAAGCAGTTGCTCCGCCATCCGGCCTTC  
CAGCTGCTGCTGGCCTTCTGCTGCTGTCCAACGCCATCACCATTGCCCTTCGCACCAACTCTTATCTCG  
GTCAGAAACACTACGAGCTATTCTCGACCATAGATGACATTGTGTTGACGATCCTTATCTGCGAGGTTCT  
GCTTGGTTGGCTTAACGGCTTCTGGATTTCTGGAAGGATGGCTGGAATATCCTCAACTTCGCAATTGTC  
TTTATCTGTTTTATGGGTTCTTCATAAAACAACCTTGACATGGTTGCCATCACCTACCCTCTCAGGGTGC  
TCCGGCTGGTGCATGTGTGTATGGCGGTGGAACCCCTGGCCAGAATCATCAAGGTTATCCTGCGAGTCGAT  
GCCAGACTTGGCCAATGTCATGGCTCTCATCTTCTTCATGCTGGTATTCTCTGTGTTGGGGTCACG  
CTCTTCGGTGCATTTGTGCCAAGCATTTCAGAACATGGGGGTTGCCCTGTACACGCTCTTCATCTGCA  
TCACTCAGGATGGATGGCTGGACATCTACACTGACTTCCAGATGGATGAAAGAGAGTACGCGATGGAGGT  
CGGGGGCGCCATCTACTTTGCCGCTTTATCACCTCGGTGCCTTCATTGGTCTCAACTTGTTCGTCGTC  
GTGGTGACCACAAACCTGGAACAATGATGAAGACCGGCGGGAAGAGGGACACCTGAACATAAAGTTTA  
CTGAGACAGAAGAGGATGAGGACTGGACCGACGAGCTGCCACTGGTGCATTGTACAGAGGCCCGCAAGGA  
TACTTCCACTGTCCCAAGGAACCACTGGTTGGGGCCCCCTGAGTAACCTCACAGAAAAGACTGCGAT  
AACTTCTGCTTGGTGCTTGAAGCAATACAGGAACTTGTGAGTACAAAGAGATCCGAGAGGAACTCA  
ACATGATCGTGGAGGAAGTGTCTCCAACCGGTTCAACCGAGGAGCAGCAAAATGTGATCTACACAAGTA  
TACCTCCAAAAGCGCCACCTTCTAAGCGAGCCCCAGAGGGGCTAACAAAGCAAGACTTGATCACTGCG  
CTGGTCAGCAGGAAAAGGTGTCTGATTCTAACATAAACATGGTTAACAAACACAAGTTCAGCCAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG218221 representing NM\_177866  
 Red=Cloning site Green=Tags(s)

MSEKHKWWQQVENIDITHLGPKRKAYELLGRHEEQVLINRRDVMKDDAWDVQEFITQMYIKQLLRHPAF  
 QLLLAFLLLSNAITIALRTNSYLGQKHYELFSTIDDIVLTILICEVLLGWLNGFWIFWKDGNILNFAIV  
 FILFMGFFIKQLDMVAITYPLRVLRLVHVCMAVEPLARIKIVILQSMPLANVMALILFFMLVFSVFGVT  
 LFGAFVPKHFQNMGVALYTLFICITQDGWLDIYDFQMDEREYAMEVGGAIYFAVFITLGAFIQLNLFVV  
 VVTTNLEQMMKTGEEHGLNIKFTEDEEDWTDDELPLVHCTEARKDTSTVPKEPLVGGPLSNLTKTCD  
 NFCLVLEAIQENLMEYKEIREELNMIVEEVSSIRFNQEQNVILHKYTSKSATFLSEPPEGANKQDLITA  
 LVSREKVSNSINMNVNKHKFSH

TRTRPLE - GFP Tag - V

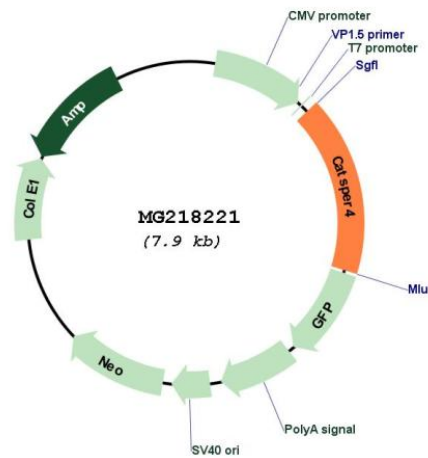
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:**

NM\_177866

|                               |   |
|-------------------------------|---|
| <b>ORF Size:</b>              | 1326 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).  |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol> |
| <b>RefSeq:</b>                | <a href="#">NM_177866.4</a> , <a href="#">NP_808534.1</a>   |
| <b>RefSeq Size:</b>           | 1730 bp   |
| <b>RefSeq ORF:</b>            | 1329 bp   |
| <b>Locus ID:</b>              | 329954  |
| <b>UniProt ID:</b>            | <a href="#">Q8BVN3</a>  |
| <b>Cytogenetics:</b>          | 4 D3  |
| <b>Gene Summary:</b>          | 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]   |