

Product datasheet for **MG201801**

Ncs1 (NM_019681) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ncs1 (NM_019681) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Ncs1
Synonyms: 9430075O15Rik; A730032G13Rik; AI836659; Freq; Mfreq; NCS-1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG201801 representing NM_019681
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGGAAATCCAACAGCAAGTTGAAGCCTGAAGTTGTGGAGGAGCTGACCAGAAAAACCTACTTCACTG
 AGAAAGAAGTACAGCAGTGGTACAAGGGCTTCATTAAGGACTGCCCCAGCGGGCAGCTGGATGCCGCTGG
 CTTCCAGAAGATCTACAAGCAGTTCTTCCATTGGAGACCCACCAAGTTCGCCACGTTTGTTCAC
 GTCTTCGACGAGAACAAGGATGGCAGGATTGAGTTCTCCGAGTTCATCCAGGCACTGTCCGTGACCTCAA
 GGGGACCTGGATGAAAAGTTGCGATGGCCTTCAAGCTTTATGACTTGGATAACGATGGCTACATCAC
 CAGGAACGAGATGCTCGACATAGTGGACGCCATTTACCAGATGGTGGGAACACCGTGGAGCTCCCAGAA
 GAAGAGAACACACCAGAGAAGAGGGTGGACCGGATCTTTGCCATGATGGACAAGAATGCTGATGGGAAGC
 TGACTCTTCAGGATTCAGGAAGGCTCCAAGGCTGATCCCTCCATTGTGCAGGGCCTGTCCCTCTACGA
 TGGGCTGGTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG201801 representing NM_019681
 Red=Cloning site Green=Tags(s)

MGKSNSKLPVEVEELTRKTYFTEKEVQWYKGF IKDCPSGQLDAAGFQKIYKQFFPFGDPTKFATFVFN
 VFDENKDGRIEFSEFIQALSVTSRGTLDKLRWAFKLYDLNDGYITRNEMLDIVDAIYQVMGNTVELPE
 EENTPEKRVDRIFAMMDKNADGKLTLEFQEGSKADPSIVQALSLYDGLV

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

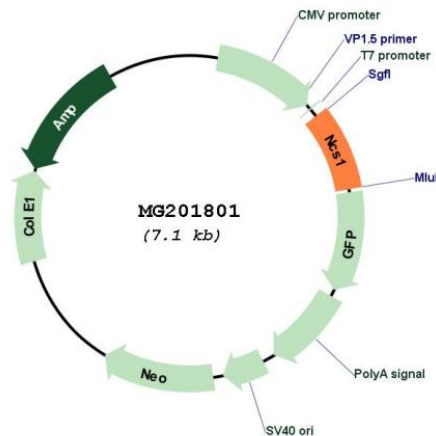


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Cloning Scheme:



Plasmid Map:



ACCN: NM_019681

ORF Size: 570 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_019681.2](#)

RefSeq Size: 4036 bp

RefSeq ORF: 573 bp

Locus ID: 14299

UniProt ID: [Q8BNY6](#)

Cytogenetics: 2 B

Gene Summary: Neuronal calcium sensor, regulator of G protein-coupled receptor phosphorylation in a calcium dependent manner. Directly regulates GRK1 (RHOK), but not GRK2 to GRK5. Can substitute for calmodulin (By similarity). Stimulates PI4KB kinase activity (By similarity). Involved in long-term synaptic plasticity through its interaction with PICK1 (By similarity). May also play a role in neuron differentiation through inhibition of the activity of N-type voltage-gated calcium channel (By similarity).[UniProtKB/Swiss-Prot Function]