

Product datasheet for **RG202389**

Frequenin (NCS1) (NM_014286) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Frequenin (NCS1) (NM_014286) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Frequenin
Synonyms:	FLUP; FREQ
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG202389 representing NM_014286 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGAAATCCAACAGCAAGTTGAAGCCGAAGTTGTGGAGGAGCTGACCAGGAAGACCTACTTTACCG
AGAAGGAGGTCCAGCAGTGGTACAAAGGCTTCATCAAGGACTGCCCCAGTGGGCAGCTGGATCGGCAGG
CTTCCAGAAGATCTACAAGCAATCTTCCCGTTCGGAGACCCACCAAGTTTGCCACATTTGTTTTCAAC
GTCTTTGATGAAAACAAGGACGGGCGAATTGAGTTCTCCGAGTTCATCCAGGCGCTGTCGGTGACCTCAC
GGGAACCTGGATGAGAAGCTACGGTGGCCTTCAAGCTCTACGACTTGGACAATGATGGCTACATCAC
CAGGAATGAGATGCTGGACATTGTGGATGCCATTACCAGATGGTGGGAATACCGTGGAGCTCCCAGAG
GAGGAGAACACTCCTGAGAAGAGGGTGGACCGATCTTTGCCATGATGGATAAGAATGCCGACGGGAAGC
TGACCCTGCAGGAGTTCAGGAGGGGTCCAAGGCAGACCCGTCATTGTGCAGGCGCTGTCCCTCTACGA
CGGGCTGGTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:	>RG202389 representing NM_014286 Red=Cloning site Green=Tags(s)
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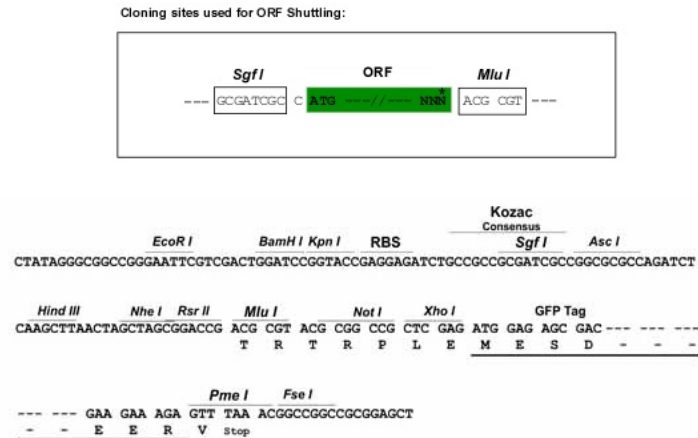
MGKSNSKLKPEVVEELTRKTYFTEKEVQWYKGFIKDCPSGQLDAAGFQKIYKQFFPFGDPTKFATFVFN
VF DENKDGRIEFSEFIQALSVTSRGTLDEKLRFWAFKLYDLNDNGYITRNEMLDIVDAIYQVMGNTVELPE
EENTPEKRVDRIFAMMDKNADGKLTLEFQEGSKADPSIVQALSLYDGLV

TRTRPLE - GFP Tag - V

Restriction Sites:	SgfI-MluI
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Cloning Scheme:



ACCN: NM_014286

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_014286.2](#), [NP_055101.2](#)

RefSeq Size: 4341 bp

RefSeq ORF: 573 bp

Locus ID: 23413

UniProt ID: [P62166](#)

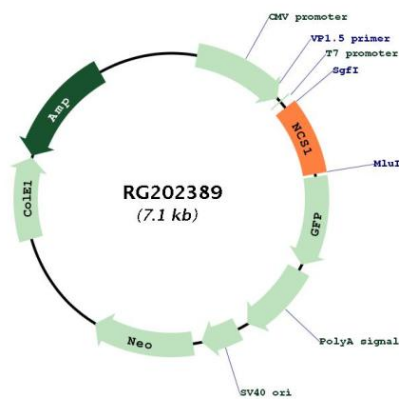
Cytogenetics: 9q34.11

Domains: EFh

Protein Families: Druggable Genome

Gene Summary: This gene is a member of the neuronal calcium sensor gene family, which encode calcium-binding proteins expressed predominantly in neurons. The protein encoded by this gene regulates G protein-coupled receptor phosphorylation in a calcium-dependent manner and can substitute for calmodulin. The protein is associated with secretory granules and modulates synaptic transmission and synaptic plasticity. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG202389