

Product datasheet for **RG226722**

TRPC4 (NM_001135957) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | TRPC4 (NM_001135957) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | TRPC4 |
| Synonyms: | HTRP-4; HTRP4; TRP4 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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**ORF Nucleotide
Sequence:**

>RG226722 representing NM_001135957
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTCAGTTCTATTACAAAAGAAATGTTAATGCTCCCTATAGAGACCGCATCCCTCTAAGGATAGTAA
 GAGCAGAATCAGAACTCTGCCATCAGAAAAAGCCTACTTGAATGCTGTGAAAAAGGAGATTATGCCAG
 TGTCAAGAAATCCCTAGAGGAAGCTGAAATTTATTTTAAAATCAATATTAATTGCATTGATCCTCTCGGA
 AGAACTGCTCTCCTCATTGCAATTGAAAATGAGAACTGGAGCTCATCGAACTACTCTTAAGCTTTAATG
 TCTATGTTGGAGATGCTCTATTACATGCTATCAGAAAAGAAGTCGTCGGAGCTGTTGAGCTGTTATTGAA
 CCACAAAAACCTAGTGGAGAAAAACAGGTGCCTCCTATACTCCTTGATAAGCAGTTCTCTGAATCACT
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 CTGTCAAGCGAAGATCCTTTTCTCACAGCTTTTCAAGTTAAGTTGGGAACCTCAGGAACTGAGCAAGTGG
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 TGACTTTTTTGTCTGCTGCTGCTGCTCAGCACATCGACAGTCCAGACTTGAACAGGCAAGTCC
 ACCACCAACCATCGTCGAGTGGATGATATTACCGTGGGTCTGGGCTTCATATGGGAGAAATTAACAG
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 CGTCTGATCTCACTGTTTACTGCAAATCTCACCTGGGACCTCTGCAAATATCTCTGGGAAGAAATGCTCC
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 GTACTTCTATTATGAAGAAACGAAAGGGTTAACCTGCAAAGGCATAAGATGTGAAAAGCAGAATAATGCA
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 CCAATGTCAAAGCACAGCATGAATTTACTGAGTTTGTGGTGCCACCATGTTGGGACATACAATGTCAT
 CTCTCTGGTTGTTCTACTCAACATGTTAATAGCTATGATGAATAATTCTTACCAACTGATTGCTGACCAT
 GCAGATATAGAATGGAAATTTGCACGAACAAGCTTTGGATGAGTTATTTGAGAAGGAGGTACTCTGC
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 AGAGAAAAGGAATACGGACACACTGGGGTTACAGGTAGGAAAGAGAGTGTGTCCATTCAAGTCAGAGAAGG
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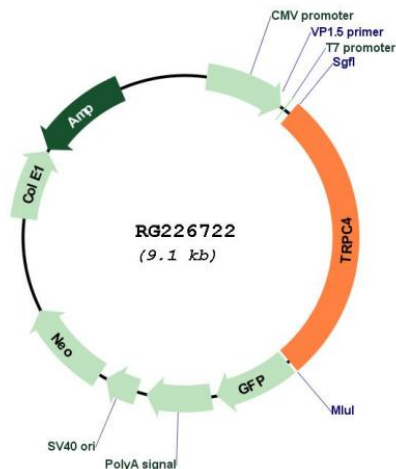
ACCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG226722 representing NM_001135957
Red=Cloning site Green=Tags(s)

MAQFYKRNVNAPYRDRIPLRIVRAESELSPSEKAYLNAVEKGDYASVKKSLLEEAEIYFKININCIDPLG
RTALLIAIENENLELIELLLSFNVYVGDALLHAIRKEVVGAVELLLNHKKPSGEKQVPPILLDKQFSEFT
PDITPIILAAHTNNYEIIKLLVQKGVSVPRPHEVRCNCVECVCSSSDVDSLRRHSRSLNIYKALASPSLIA
LSSEDPFLTAFQLSWELQELSKVENEFKSEYEELSRQCKQFAKDLLDQTRSSRELEIILNYRDDNSLIEE
QSGNDLARLKLAIKYRQKEFVAQPNCQQLLASRWYDEFPGWRRRHWA VKMVTCTFIIGLLFPVFSVCYLIA
PKSPLGLFIRKPFIKFIHTASYLTFLFLLLLASQHIDRSDLNRQGPPPTIVEWMILPWVLFVWGEIKQ
MWDGGLQDYIHDWWNLDFVMNSLYLATISLKIVAFVKYSALNPRESWDMWHPTLVAEALFAIANIFSSL
RLISLFTANSHLGPLQISLGRMLLDILKFLFIYCLVLLAFANGLNQLYFYYEETKGLTCKGIRCEKQNNA
FSTLFETLQSLFWSIFGLINLYVTNVKAQHEFTEFVGATMFGTYNVISLVLLNMLIAMMNSYQLIADH
ADIEWKFARTKLWMSYFEEGGLPTPFNVIPSPKSLWYLKWIWTHLCKKKMRRKPESFGTIGRAADNL
RRHHQYQEVMRNLVKRYVAAMIRDAKTEEVARQQAAGPLERNIQLESRGLASRGDLSIPGLSEQCVLVDH
RERNTDTLGLQVGKRVCPFKEKVVVEDTVPIIPKEKHAKEDSSIDYDLNLPDVTTHEDYVTTTL

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Plasmid Map:


ACCN: NM_001135957

ORF Size: 2508 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_001135957.3](#)

RefSeq Size: 3111 bp

RefSeq ORF: 2511 bp

Locus ID: 7223

UniProt ID: [Q9UBN4](#)

Cytogenetics: 13q13.3

Protein Families: Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane

Gene Summary: This gene encodes a member of the canonical subfamily of transient receptor potential cation channels. The encoded protein forms a non-selective calcium-permeable cation channel that is activated by Gq-coupled receptors and tyrosine kinases, and plays a role in multiple processes including endothelial permeability, vasodilation, neurotransmitter release and cell proliferation. Single nucleotide polymorphisms in this gene may be associated with generalized epilepsy with photosensitivity. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Aug 2011]