

Product datasheet for **MG225560**

Trpv5 (NM_001007572) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Trpv5 (NM_001007572) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Trpv5
Synonyms:	CAT2; D630033B11; ECAC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG225560 representing NM_001007572
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGGCTAAAACCTCCTTGGATCCAACCTCAGAACTTCTCAATTGGTGGGTGAGAGACCAAGACTGGA
 ACCAGCACGTGGATCAGCTACATATGCTACAGCAAAAAAGTATTTGGGAGTCTCCACTGCTTAGAGCAGC
 CAAGGAAAATGATATGTGCACACTTAAGAACTTCAGCATGACCAGAACTGTGACTTCCGGCAAAGAGGA
 GCTCTGGGAGAGACAGCACTGCATGTAGCTGCCCTCTATGATAACCTGGATGCTGCTATAATGCTGATGG
 AGGCTGCTCCATACTTGGTCACAGAGTCCACACTGTGTGAGCCATTTGTAGGTGAGACTGCACTGCACAT
 CGCAGTCATGAACCAGAATGTGAACCTAGTCCGTGCCCTGTTGGCCCGAGGGGCCAGTGCCTCCGCCAGA
 GCTACAGGCTCCGCCTCCATCGAAGTTCACACAACCTCATCTACTATGGAGAACACCCTTTGCTCTTTG
 CTGCTGTGTGGGTAGTGAGGAGATTGTTAGGTTGCTCATTGAGCATGGAGCTGACATCCGTGCCAGGA
 CTCCTGGGAAATACAGTACTACACATACTTGTCTGCAGCCCAACAAAACCTTTGCCTGTCAGATGTAC
 AACCTGCTACTGCTATGATGGAGGAGACCACCTGAAGTCCCTGGAGCTTGTGCCCAACAACAGGGAC
 TCACCCCTTCAAGTTGGCTGGGTGGAAGGCAACACAGTGATGTTTCAACATCTAATGCAGAAAACGGAA
 GCGCATCCAGTGGTCTTTGGGCCCTAACATCTTCCCTCTATGACCTCACAGAGATTGACTCCTGGGGT
 GAGGAGCTGCTCTTTCTGGAGCTGTGGTTTCTCCAAGAAGAAAGAGGCTCGACAGATTCTAGAACAGA
 CCCAGTGAAGGAGCTGGTGAGCCTGAAGTGAAGAAATATGGACAGCCTTATTTCTGCCTCCTGGGTGC
 TCTGTACATCTTACATGGTCTGCTTACCACATGCTGTGTTTACC GCCCCTCAAGTCCGAGATGCC
 AACCGTACACATGTTGAGATAACACCATCATGGAACAGAAATCACTACAGGAAGCATATGTGACTTACC
 AGGATAAGATCCGGCTGGTCGGGAGTTGGTGACAGTCATTGGGGCTGTAATTATTCTACTCCTAGAGAT
 CCCAGACATCTTCAGAGTTGGTGCCTCTCGCTACTTTGGACAAACAGTTCTTGGGGGCCATTCCATGTC
 ATCATCATTACATATGCCTCCCTTGTGCTACTGACTATGGCAATGAGGCTTACCAATGTGAATGGCGAGG
 TAGTGCCCATGTCCATGGCCCTGGTGTGGGCTGGTGTAGTGTACTTCCGCCGAGGATTCCAGAT
 GCTGGGCCCTTCAACATCATGATTGAGAAGATGATTTTTGGAGACCTACTGCGCTTCTGCTGGCTAATG
 GCTATGGTCATCCTGGGATTTGCCTCAGCCTTCTATATCATTTCAGACAGAGGATCCAGATAATCTGG
 GGGAAATCTCCGACTACCCACAGCAATGTTGAGCACCTTTGAGCTGTTCCCTACCATCATTGACGGACC
 TGCCAATTACAGAGTGGATCTGCCCTTCATGTACAGTGTACCTATGCCACCTTTGCCATCATCGCCACA
 CTGCTCATGCTCAACTTGTTCATTGCCATGATGGGCGACACTCACTGGCGAGTGGCCAGGAGAGGGACG
 AGCTCTGGAGAGCACAAGTTGTAGCCACCACAGTGATGCTGGAGAGGAAAATGCCTCGTTTCCTGTGGCC
 TCGCTCTGGTATCTGTGGTTGCGAATACGGCTGGGAGACCGTTGGTTCTTACGGGTTGAACACCACCAG
 GAGCAGAAATCCTATCGAGTACTTCGATATGTGGAAGCTTTCAAATCTTCAGACAAAGAGGAAGTACAAG
 AGCAGCTATCTGAGAAACAACCTTCTGGGACTGAGACTGGGACTTTAGCTAGAGGCTCTGTGTTCTCCA
 AACACCTCCTTTGTCCAGGACTACATCCCTAAGCAGCAATAGCCACCGTGGATGGGAAATCTCCGTGGA
 AACACCTGGGACATTTGAATCTTGACTAGACCCTGGTGAAGGGGATGGGGAAGAGATCTACCAGTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG225560 representing NM_001007572
 Red=Cloning site Green=Tags(s)

MGAKTPWIQLQKLLNWWVRDQDWNQHVLDQLHMLQKSIWESPLLRAAKENDMCTLKKLQHDQNCDFRQRG
 ALGETALHVAALYDNLDAAIMLMEAAPYLVTSTLCEPFVGTALHIAVMNQNVNLRALLARGASASAR
 ATGSAFHRSSHNLIIYGEHPLSFAACVGSSEIVRLLIEHGADIRAQDSLGNLHILVLQPNKTFACQMY
 NLLLSDYDGGDHLKSLLEVPNNQGLTPFKLAGVEGNTVMFQHLMQKRKRIQWSFGPLTSSLYDLTEIDSWG
 EELSFLLELVSSKKKEARQILEQTPVKELVSLKWKYQGPYFCLLGALYIFYMVCFITCCVYRPLKFRDA
 NRTHVRDNTIMEQKSLQEAYVTYQDKIRLVGELVTVIGAVIILLLEIPDIFRVGASRYFGQTVLGGPFHV
 IITYASLVLLTMAMRLTNVNGEVVPMALVLGWCSVMYFARGFQMLGPFTIMIQQMIFGDLRFLCWM
 AMVILGFASAFYIIFQTEDPDNLGEFSDYPTAMFSTFELFLTIIDGPANYRVDLPFMYSVTYATFAIAT
 LLMNLFIAMMGDTHWRVAQERDELWRAQVATTVMLEKMPRFLWPRSGICGCEYGLGDRWFLRVEHHQ
 EQNPYRVLRYVEAFKSSDKEEVQEQLEKQPSGTETGTLARGSVVLQTPPLSRTTSLSSNSHRGWEILRR
 NTLGHLNLGLDPGEGDGEEIYQF

TRTRPLE - GFP Tag - V

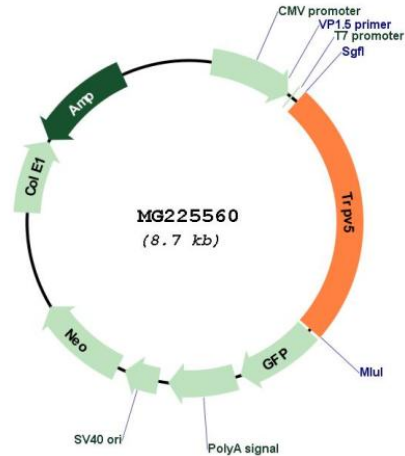
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001007572

ORF Size: 2169 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_001007572.2](#), [NP_001007573.1](#)

RefSeq Size: 2601 bp

RefSeq ORF: 2172 bp

Locus ID: 194352

UniProt ID: [P69744](#)

Cytogenetics: 6 B2.1

Gene Summary: Constitutively active calcium selective cation channel thought to be involved in Ca(2+) reabsorption in kidney and intestine (PubMed:12077127, PubMed:14679186). Required for normal Ca(2+) reabsorption in the kidney distal convoluted tubules (PubMed:14679186). The channel is activated by low internal calcium level and the current exhibits an inward rectification. A Ca(2+)-dependent feedback regulation includes fast channel inactivation and slow current decay (PubMed:12077127). Heteromeric assembly with TRPV6 seems to modify channel properties. TRPV5-TRPV6 heteromultimeric concatemers exhibit voltage-dependent gating (By similarity).[UniProtKB/Swiss-Prot Function]