

Product datasheet for **RG212078**

KCNC4 (NM_004978) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNC4 (NM_004978) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KCNC4
Synonyms:	C1orf30; HKSHIIC; KSHIIC; KV3.4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG212078 representing NM_004978
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATCAGCTCGGTGTGTCTCCTCCTACCGCGGGCGAAGTCGGGAACAAGCCTCCGTCCAAAACAT
 GTCTGAAGGAGGAGATGGCCAAGGGCGAGGCGTCGGAGAAGATCATCATCAACGTGGGCGGCACGCGACA
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 CCCC CGGACGTGTGCGGGCCGCTCTTCGAAGAGGAGCTCACCTTCTGGGGCATCGACGAGACCGACGTG
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 CACATTCGCTCCTCCGTGACCTTCCCTTACGATTACCTGAGGCTGCATGCCCTCCAACCTGCTGGGACT
 CTGTTCTGCCACAT

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG212078 representing NM_004978
 Red=Cloning site Green=Tags(s)

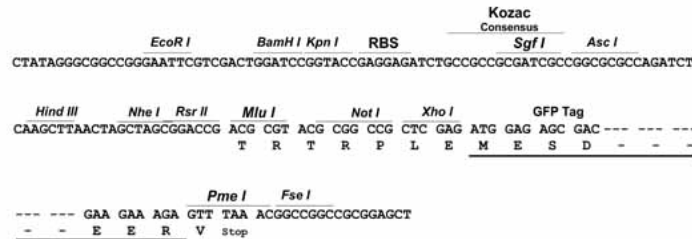
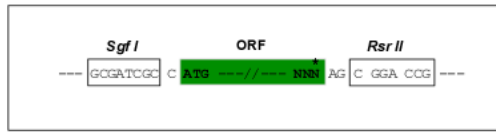
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 RMWALFEDPYSSRAARVAFASLFFILVSIITTFCLETHEAFNIDRNVTEILRVGNITSVHFRREVETEPI
 LTYIEGVCVLFWTFLEFLVRIVCCPDTLDFVKNLLNIIDFVAILPFYLEVGLSGLSSKAARDVLFGLRVVR
 FVRIILRIFKLRHFVGLRVLGHLTRASTNEFLLLIIFLALGVLI FATMIYYAERIGARPSDPRGNDHTDF
 KNPIPIGFWWAVVTMTTLGYDMYPKTWSGMLVGALCALAGVLT IAMPVPVIVNFMYYSLAMAKQLPK
 KRKKHVPRAQLESMPYCKSEETSPRDSTCSDTSPAREEGMIERKRADSKQNGDANAVLSDEEGAGLTQ
 PLASSPTPEERRALRRSTTRDRNKAAACFLLSTGDYACADGSVRKGTFVLRDLPLQHSPEAACPPTAGT
 LFLPH

SGP**TRRRLE** - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_004978

ORF Size: 1905 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_004978.6](#)

RefSeq Size: 2879 bp

RefSeq ORF: 1908 bp

Locus ID: 3749

UniProt ID: [Q03721](#)

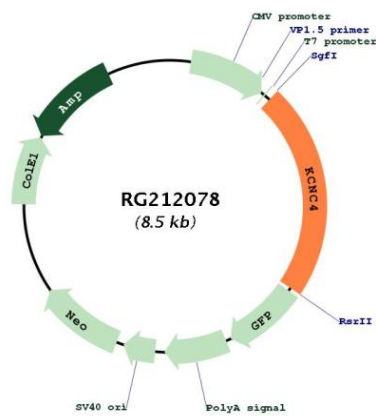
Cytogenetics: 1p13.3

Domains: BTB, K_tetra, ion_trans

Protein Families: Druggable Genome, Ion Channels: Potassium, Transmembrane

Gene Summary: The Shaker gene family of Drosophila encodes components of voltage-gated potassium channels and is comprised of four subfamilies. Based on sequence similarity, this gene is similar to the Shaw subfamily. The protein encoded by this gene belongs to the delayed rectifier class of channel proteins and is an integral membrane protein that mediates the voltage-dependent potassium ion permeability of excitable membranes. It generates atypical voltage-dependent transient current that may be important for neuronal excitability. Multiple transcript variants have been found for this gene. [provided by RefSeq, Jul 2010]

Product images:



Circular map for RG212078