

Product datasheet for **RG206124**

KCNF1 (NM_002236) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNF1 (NM_002236) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KCNF1
Synonyms:	IK8; KCNF; KH1; KV5.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG206124 representing NM_002236
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGACGGGTCCGGGAGCGCAGCCTCCGGAGCCGGCAGCCAGAGCTCCGCTGCCAGCGACGACATAG
 AGATAGTCGCAACGTGGGGGGCGTGCGCAGGTGCTGTACGGGACCTCCTCAGTCAGTACCCTGAGAC
 CCGGCTGGCGGAGCTCATCAACTGCTTGCTGGGGCTACGACACCATTCTCCCTGTGCGAGCTAC
 GACCCCGCAAGCGGAGTTCTACTTTGACAGGGACCCGGACGCCTTCAAGTGTGTATCGAGGTGACT
 ATTTGGGGAGGTCCACATGAAGAAGGGCATCTGCCCCATCTGCTTCAAGAACGAGATGGACTTCTGAA
 GGTGGACCTCAAGTTCCTGGACGACTGTTGCAAGAGCCACCTGAGCGAGAAGCGGAGGAGCTGGAGGAG
 ATCGCGCCCGCTGCAGCTCATCTGGACGACCTGGGCGTGGACGCGGCCGAGGGCCGCTGGCGCCGCT
 GCCAGAAGTGCCTCTGGAAGTTCCTGGAGAAGCCGAGTCGTCTGCCCGCGGGTGGTGGCCGTGCT
 CTCCTTCTGCTCATCTCGTCTCGTCCGTGGTATGTGCATGGGCACCATCCCCGAGCTGCAGGTGCTG
 GACGCCGAGGGCAACCGGTGGAGCACCCGACGCTGGAGAACGTGGAGACGGCGTGCATTGGCTGGTTCA
 CCCTGGAGTACCTGCTGCGCCTTCTCTCGTCACCCAACAAGCTGCACTTCGCGCTGTCCTTCATGAACAT
 TGTGGACGTGCTGGCCATCCTCCCCTTCTACGTGAGCCTCACGCTCACGCACCTGGTGCCCGCATGATG
 GAGCTGACCAACGTGCAGCAGGCCGTGCAGGCGCTGCGGATCATGCGCATCGCGCGCATCTTCAAGCTGG
 CCCGCCACTCCTCGGGCTGCAGACCCTCACCTATGCCCTCAAGCGCAGCTTCAAGGAACGGGGTCTGCT
 GCTCATGTACCTGGCAGTGGGTATCTTCGTCTTCTGCCCTGGGCTACACCATGGAGCAGAGCCATCCA
 GAGACCCTGTTAAGAGCATCCCCAGTCTTCTGGTGGCCATCATCACCATGACCACCGTCGGCTACG
 CACGACATCAACCAAGACCAAGTGGCAAGCTCAACGCGGCCATCAGCTTCTGTGTGGTGTGCATGCG
 CATCGCCCTGCCATCCACCCCATCAACAACCTTGTGAGGTAACAACAAGCAGCGCGTCTGGAG
 ACCGCGGCCAAGCACGAGCTGGAGCTGATGGAACCAACTCCAGCAGCGGGGGCAGGGCAAGACCGGGG
 GCTCCCGCAGTGACCTGGACAACCTCCCTCCAGAGCTGCGGGGAAGGAGGCGCCGAGCTGCAGCAGCCG
 GCTGAAGCTCTCCACAGCGACCTTCATCCCCTCCTGACCGAGGAGAAGCACACAGGACCCGGCTC
 CAGAGTTGCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG206124 representing NM_002236
 Red=Cloning site Green=Tags(s)

MDGSGERSLPEPGSQSSAASDDIEIVVNVGGVRQVLYGDLLSQYPETRLAELINCLAGGYDTIFSLCDDY
 DPGKREFYFDRDPDAFKCVIEVYFGEVHMKGICPICFKNEMDFWKVDLKFLLDCCCKSHLSEKREELEE
 IARRVQLILDDLGVDAEGRWRRQCQKCVWKFLEKPESSCPARVVAVLSFLLILVSSVVMCMGTIPELQVL
 DAEGNRVEHPTLENVETACIGWFTLEYLLRFLFSSPNKLHFALSFMNIVDVLAAILPFYVSLTLTHLGARM
 ELTNVQAVQALRIMRIARIFKLARHSSGLQTLTYALKRSFKELGLLMYLAVGIFVFSALGYTMEQSHP
 ETLFKSIQSFVWAIITMTTVGYGDIYPKTTLGLNAAISFLCGVIAIALPIHPIINNFVRYNQRVLE
 TAAKHELELMELNSSSGGEGKTGGSRSDDLNLPPPEPAGKEAPSCSSRLKLSHSDTFIPLL TEEKHHRTRL
 QSCK

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_002236

ORF Size: 1482 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

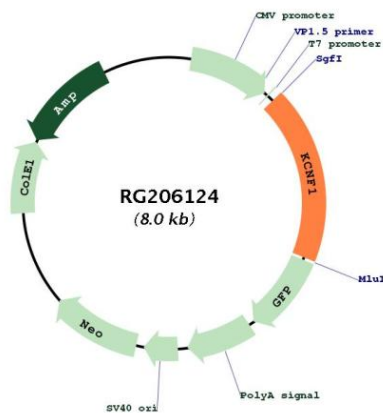
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_002236.3](#)

RefSeq Size: 2304 bp
RefSeq ORF: 1485 bp
Locus ID: 3754
UniProt ID: [Q9H3M0](#)
Cytogenetics: 2p25.1
Domains: K_tetra, ion_trans
Protein Families: Druggable Genome, Ion Channels: Potassium, Transmembrane
Gene Summary: Voltage-gated potassium (Kv) channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. This gene encodes a member of the potassium channel, voltage-gated, subfamily F. This gene is intronless and expressed in all tissues tested, including the heart, skeletal muscle, brain, kidney, and pancreas. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG206124