

Product datasheet for **SC118741**

Kir4.1 (KCNJ10) (NM_002241) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kir4.1 (KCNJ10) (NM_002241) Human Untagged Clone
Tag:	Tag Free
Symbol:	Kir4.1
Synonyms:	BIRK-10; KCNJ13-PEN; KIR1.2; KIR4.1; SESAME
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC118741 sequence for NM_002241 edited (data generated by NextGen Sequencing)

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ATGACGTCAGTTGCCAAGGTGTATTACAGTCAGACCACTCAGACAGAAAGCCGGCCCTA
ATGGGCCAGGGATACGACGGCGGAGAGTCTGACAAAAGATGGTCGACCAACGTGAGA
ATGGAGCACATTGCCGACAAGCGCTTCTCTACCTCAAGGACCTGTGGACAACCTTCATT
GACATGCAGTGGCGCTACAAGCTTCTGCTCTTCTCTGCGACCTTGCAGGCACATGGTTC
CTCTTTGGCGTGGTGTGGTATCTGGTAGCTGTGGCACATGGGGACCTGCTGGAGCTGGAC
CCCCGGCCAACACACCCCTGTGTGGTACAGGTGCACACACTCACTGGAGCCTTCCTC
TTCTCCCTTGAATCCCAAACCACCTGGCTATGGCTTCCGCTACATCAGTGAGGAATGT
CCTGGCCATTGTGCTTCTTATTGCCAGCTGGTGTCTACCACCATCCTGGAAATCTTC
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GCCAATATGCGCAAAAGCCTCCTCATTGGCTGCCAGGTGACAGGAAAAGTCTCAGACC
CACAAACCAAGGAAGGGGAGAACATCCGGCTCAACCAGGTCAATGTGACTTTCCAAGTA
GACACAGCCTCTGACAGCCCTTCTTATTCTACCCCTTACCTTCTATCATGTGGTAGAT
GAGACCAGTCCCTTGAAGATCTCCCTCTTGCAGTGGTGGGGTACTTTGAGCTGGTG
CTGATCCTAAGTGGGACAGTGGAGTCCACCAGTCCACCTGTGAGGTGCCACTTCTCTAC
TGCCAGAGGAGATCCTTTGGGGCTACGAGTTCACACCTGCCATCTCACTGTCAGCCAGT
GGTAAATACATAGCTGACTTTAGCCTTTTGGACCAAGTTGTGAAAGTGGCCTCCTCTAGT
GGCCTCCGTGACAGCACTGTACGCTACGGAGACCCTGAAAAGCTCAAGTTGGAGGAGTCA
TTAAGGGAGCAAGCTGAGAAGGAGGGCAGTGCCCTTAGTGTGCGCATCAGCAATGTCTGA
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Clone variation with respect to NM_002241.4



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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_002241 unedited</p> <pre>ACGACTTCACTATAGGGCGGCCGATTTCGGCACGAGGGCACAGCTCTGCTCCTAACTCC TGCCCCCCCCGTCCGTCATCTGTCCCGCTGCCCGCGGCCCATCCAAGGGGCCACTCCA CCTCGGACCCAAGATGACGTGAGTTGCCAAGGTGATTACAGTCAGACCACTCAGACAGA AAGCCGGCCCCAATGGGCCAGGGATACGACGGCGGAGAGTCTGACAAAAGATGGTCCG CAGCAACGTGAGAATGGAGCACATTGCCGACAAGCGCTTCTCTACCTCAAGGACCTGTG GACAACCTTCATTGACATGCAGTGGCGCTACAAGCTTCTGCTCTTCTCTGCGACCTTTGC AGGCACATGGTTCTTCTTTGGCGTGGTGTGGTATCTGGTAACTGTGGCACATGGGGACCT GCTGGAGCTGGACCCCCCGGCAACCACACCCCTGTGTGGTACAGGTGCACACACTCAC TGGAGCCTTGCTCTTGTGCCTTGAATCCAAACCACCATTTGGGTATGGGTTACGGTACATA AGTGAGGAATGTGCACTGGACATTGTGCTTGTATTGAGCAGGTGGTGTGGCCACCATG CTGAGAATCTAGATGCAAGATCCTTGTGGGAAAATTGACCGGACGAAAACGGGAGTGA AACCGTGGTTTGAAGCGCGTCCGGAGTGGGACTGTGGCAATGGGTGATGCGTGCCTGT GAAGCAGGTGATGACTTGGCGGAGACCGGGCTAGGTTGTTGGGTTGATGGACNGATGAA CTATGGTGGTGCCTGGCCAGGGGTGAGGGGTGGACCCTGTGCTGGAGCCGCGCCTTGT GAGTGTGTGGGTGGCCCCCGCGGAGAGGGGGCGGCTTAAGACCAGGCCAGGAGNNTG GTGGGGGNAGCGGGACGGATATAAGCTCGTTACACAACCTATGGATAAAAGAACGATATA AAAGATAAGACTAANATATTC</pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_002241 unedited</p> <pre>GTACCGCGGCACGCACTTCTAGTAGTCGAGNNNTTTTTTTTTTTTTTTTTTTTTTTTAGG AAACAAAAGGGGCTTTATTTTATTTTATTTTAAAAAGGCGCTACAGTGGCAGGACG CTGCTGGGGATGGGGACACAGTGAAGTGGGAGATTTTCCAAGACTTCCCCTCCCTAT TGGCCTCCGAGTTCCTCTTCTTCCGGCCTATCAGTAGCATAGGATTCACAAAAGCCTT CATGAATGCCTCTTTATTTCTGAAAAGGACTTCTACCCCTCCCTTTCCATTTCCAGAC TTGAAATCCTTATCAGCTATCTCACTTCCATGTTGAAACCAGGACCACTGATTGTAAGT CTGAAAATCTGGGTGTCTACCCATAACCAGGCCAAGATATCTGCCCAATGTAAAG GCTCTGAATATTTCTTTCTGGACATTCATATATTTGGGCATATATACATCTATATACA TCCTTCTATATATATATCTCTGTTCTTTCTTCTTAGATAAACCTTCATATATGGC ATATCCTAATTTCCCAAGCCCTCCCACTCTTTGTTTGGCAGCCTAAGCAAGACTCAAGAG TTTCATTGATTTCACTAAGTCCCGCAGCATATTGCTTTCTCATCTTTCTACCCCAAGAT TCTTCCCATCACGTGTTTCCCCCTTCCGAAAACCCCTTTTTAACCCGTGCCTACC GAAATTCCTTTTTAACTGGGCTCTACTCTGCTGATTTCCAAGCCCCAGTGGGTTGG GGGCCATTTCTAACAAACCTGGCGGTTCTAAGCCGGCCTATGGCTAAAGAAGATTAGG GCCAAGGGAAAAACATTGTCCAAAAACCTTTAAGTAAGGAAGGGGGACTTGCCCCGCG CAGGGCTCGGGAAAAAACCCATCCCCTTTCAGGACACGGGTTAAGTGCCCTTAACG AACCCGGGAAACCGCAGGATCT</pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_002241
Insert Size:	4600 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_002241.2](#), [NP_002232.2](#)

RefSeq Size: 4515 bp

RefSeq ORF: 1140 bp

Locus ID: 3766

UniProt ID: [P78508](#)

Cytogenetics: 1q23.2

Domains: IRK

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

Gene Summary: This gene encodes a member of the inward rectifier-type potassium channel family, characterized by having a greater tendency to allow potassium to flow into, rather than out of, a cell. The encoded protein may form a heterodimer with another potassium channel protein and may be responsible for the potassium buffering action of glial cells in the brain. Mutations in this gene have been associated with seizure susceptibility of common idiopathic generalized epilepsy syndromes. [provided by RefSeq, Jul 2008]