

Product datasheet for **RR204616**

Kcnh7 (NM_131912) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnh7 (NM_131912) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kcnh7
Synonyms:	erg3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR204616 representing NM_131912 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCTGTTTCGACGGGGCATGTGGCACCGCAAAACACCTTCTGGGGACCATCATACGGAATTTGAAG
GGCAGAATAAAAAATTTATCATTGCAAATGCCAGAGTGCAGAACTGTGCCATCATCTACTGCAATGATGG
CTTCTGTGAGATGACAGGTTTCTCCAGGCCAGATGTCATGCAGAAGCCATGCACCTGCGACTTTCTCCAT
GGGCTGAGACCAAGAGGCATGATATTGCCAGATTGCCAGGCGCTGTTGGGGTACAGAGAGAGAAAG
TGGAGGTACCTACTATCACAAGATGGTTCACCTTTATTTGTAACACTCACATAATCCAGTAAAGAA
CCAAGAGGGTGTGGCTATGATGTTCACTAATTTGAGTATGTGACAGATGAAGACAATGCTGCCTCC
CCAGAGAGAGTCAACCAATATTGCCAGTCAAATCTGTAATCGGAACTTTTTGGGTTCAAATTTCTGT
GTCTGAGAGTTCTAACATACAGAAAGCAGTCTTGCCGCAGGAAGACCCGGACGTGGTAGTCATTGATTC
TTCTAAGCACAGCGATGACTCTGTGGCTATGAAGCACTTAAGTCTCCACGAAAGAAAGCTGCAGTCCC
TCTGAAGCAGATGATACGAAGCCTTGATACAGCCTAGCCAGTGTCTCCCTTAGTGAACATACAGGAC
CTCTGGACCATTCCTCTCCAAAAGGCAATGGGACCGCCTCACCTGACATGCTGCAGTCAAGTCCCCA
ACTAACACACTCCAGGTCAAGGGAGAGCCTCTGTAGCATACGGAGAGCATCTTCAGTTCATGATATAGAA
GGGTTCAATGTCCACCCCAAGAACATATTTAGAGATCGACATGCCAGTGAAGACAATGGTCGAAATGTCA
AAGGACCTTTCAATCATATCAAGTCAAGCCTGTTGGGATCCACATCAGATTCAAACCTCAACAAATACAG
CACCATTAACAAGATCCCGCAACTCACTCTGAACTTTTAGATGTCAAAACTGAGAAAAAGAATACTTCC
CCGCTTCTTCAGACAAAATATTATTGCCAAAGGTTAAAGAGAGGACACACAACGTGACAGAGAAGG
TAACTCAGGTTCTTTCTTTGGGAGCAGATGCTTGCCAGAATACAAGCTGCAGACGCCACGCATCAACAA
ATTTACAATATTGCACTACAGCCCTTTCAAAGCAGTGTGGGATTGGCTCATTTTACTCCTGGTCATTTAT
ACTGCTATATTCACCCCTACTCGGCAGCCTTTCTCCTCAACGACAGAGAGGAGCAGAAAAGACGAGAAT
GTGGCTATTCTGTAGCCCTTTGAATGTGGTAGACTTGATTGTGGATATTATGTTTATTATAGACATCCT
AATAAACTTCAGAACAACCTATGTAATCAGAACGAAGAAGTGGTAAGTATCCTGCCAAAATAGCAGTA
CACTACTTCAAAGGCTGGTTCCTGATTGACATGGTCGCAGCCATCCCTTTTGACTTGCTGATTTTCGGAT



[View online >](#)

CAGGCTCTGATGAGACAACAACACTAATTGGTCTTTTGAAGACTGCACGTCTCCTGCGTCTTGTCGTGT
AGCCAGGAAACTGGACCGATACTCAGAATATGGTGCCGCTGTTCTAATGCTCTTGATGTGCATATTTGCC
CTGATTGCCACTGGCTGGCTTGCATCTGGTATGCGATTGGGAATGTAGAGAGGCCCTATCTGACTGACA
AAATTGGATGGTTGGATTCTTAGGAACACAAATTGGGAAACGTTACAATGACAGTGACTCGAGTTCTGG
ACCGTCCATTAAGACAAATACGTCACGGCACTTACTTTACCTTCAGCAGTCTAACCAGTGTAGGATT
GGAAATGTGTCTCTAACACCAATTCCGAGAAAACTTTTCCATTTGTGTATGTTGATTGGCTCTCTAA
TGTATGCGAGCATTTTTGGGAATGTTTCTGCAATTATTCAAAGACTGTACTCGGAACTGCCAGGTACCA
CATGCAGATGCTGAGAGTAAAAGAGTTCATTTCGCTTCCACAAAATCCCAACCCTCTGAGGCAACGGCTT
GAGGAGTATTTCCAGCACGCATGGACGTACACTAACGGCATTGACATGAACATGGTCTTAAAGGGATTTT
CGGAATGTTTACAAGCTGACATTTGCCTGCATCTAAACCAGACTTTGCTCCAAAACCTGCAAAGCCTTTTCG
AGGAGCAAGTAAAGGTTGCCTCAGAGCTCTGGCAATGAAGTTCAAACCACCCATGCCCTCCAGGAGAC
ACCCTGGTTCACTGTGGGACGTCTAACTGCACTGTACTTCTTATCCAGAGGCTCCATTGAAATCTCTCA
AGGATGACATAGTGGTAGCTATTCTAGGAAAAATGATATCTTTGGAGAAATGGTTCATCTTTACGCCAA
GCCTGGCAAATCTAATGCAGATGTGAGAGCGCTCAGTATTGTGACCTGCATAAGATTACGCGAGAAGAC
TTATTAGAGTCTTGATATGTATCCGGAATTTTCTGATCACTTCTGACAAATCTAGAACTGACTTTCA
ACCTGAGACACGAAAGTCAAAGTCCCAATCCATAAATGATTCTGAAGGGGACACCTGTAAGCTTCGAAG
AAGGAGATTGTCCTTTGAAAGCGAAGGCGACAAAGATTTAGCAAAGAAAACAGTGCAAATGACGCTGAC
GATTCCACAGATAACAATAAGACGTTATCAGAGTCCAAGAAGCACTTCGAAGAGAAGAAAAGCAGATCGT
CTTCTTTATCTCCTCCATCGATGATGAGCAAAAGCCACTCTTCTGGGAACAGTAGATTCCACTCCAAG
AATGGTAAAAGCAAGCAGGACCCATGGTGAAGAAGCAGCGCCCCCTCAGGAAGAATTCACACAGATAAA
AGGAGTCACTCCTGCAAAGATATCACTGACACACACAGCTGGGAAAGAGAGCATGCCCGGGCTCAGCCTG
AGAATGCAGTCCCTCCGACTTCAGAGAGCTGCCTGGGCATCTCTGAGACCGAAAGCGACCTCACCTA
TGGGGAAGTGGAGCAGAGGTTAGATTTGCTTCAAGAGCAACTAACAGACTTGAATCCCAAATGACAACG
GACATCCAGGCCATCTTACAGCTCTGACAGAAACAACCACCGTAGTCCCTCCAGCCTACAGCATGGTGA
CCGAGGAGCAGAGTACCAGAGGCCATCCTCCGTCTGCTGAGAACCAGTACCCTAGAGCATCCATTAA
GACAGACCGGAGCTTCAGCCCCTCTCACAATGTCCTGAATTTCTCGACCTTGAAAAGTCCAAAACCTCAA
TCCAAAGAATCACTGTCAAGCGAAAGCGCTGAACACGGCTTCAGAAGACAACCTGACTTCACTTTTAA
AACAAAGACAGTGCATCGTCAGAGCTTGACCCGCGCAAAGAAAATCTTACCTTCATCCCATCCGGCA
TCCGTCTCTGCCAGACTCCTCCCTAAGCACTGTAGGGATCTTGGGTCTCCATAGGCATGTTTCTGATCCT
GGTCTTCCGGAAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR204616 representing NM_131912
 Red=Cloning site Green=Tags(s)

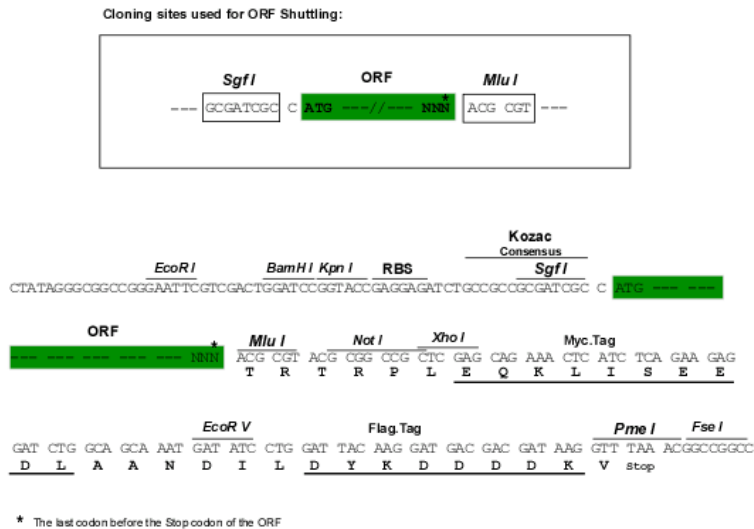
MPVRRGHVAPQNTFLGTIIRKFEQNKFFIIANARVQNCAIICYNDGFCEMTGFSRPDVMQKPCDFLH
 GPETKRHDIAQIAQALLGSEERKVEVYHKNSTFICNTHIIPVKNQEGVAMMFIINFEYVTDENNAAS
 PERVNPILPVKSVNRKLFGFKFPLRVLYRQKQSLPQEDPDVVVIDSSKHSDSVAMKHFKSPTKESCSP
 SEADDTKALIQPSQCSPLVNIISGPLDHSSPKRQWDRLYPDMLQSSSQLTHSRRESLCSIRASSVHDIE
 GFNVHPKNI FRDRHASEDN GRNVKGPFNHIKSSLLGSTDSDNLNKYSTINKIPQLTLNFSVKTEKNTS
 PPSSDKTIIAPKVKERTHNVTEKVTVQLVSLGADVLPEYKLTQPRINKFTILHYSFKAVDWLILLVIY
 TAIFTPYSAAFLLNDREEQKRRECGYSCSPLNVVDLIVDIMFIIIDILINFRTTYVNQNEEVVSDPAKIAV
 HYFKGWFIDMVAAPFDLLIFGSGSDETTTLIGLLKTARLLRLVRVARKLDRYSEYGAAVLMLLMCIFA
 LIAHWLACIWIYAIGNVERPYLTDKIGWLDLGTQIGKRYNDS DSSSGPSIKDKYVTALYFTFSSLTSVGF
 GNVSPNTNSEKIFSI CVMLIGSLMYASIFGNVSAIIQRLYSGTARYHMQLRVKEFIRFHQIPNPLRQRL
 EEYFQHAWTYTNGIDMNMVLKGFPECLQADICLHLNQTLLQNCKAFRGASKGCLRALAMFKTTHAPPGD
 TLVHCGDVL TALYFLSRGSIEILKDDIVVAILGKNDIFGEMVHL YAKPGKSNADVRALTYCDLHKIQRED
 LLEVLDMPYEFSDHFLT NLELTFNLRHESAKSQSINDSEGDTCKLRRRRLSFESEGDKDFSKENSANDAD
 DSTDTIRRYQSSKHFEEKSRSSSFISSIDDEQKPLFLGTVDSTPRMVKASRHGEEAAPP SGRIHDTK
 RSHSCKDITDTHSWEREHARAQPEECSPSGLQRAAWGISETESDLTYGEVEQRLDLLQEQLNRLESQMTT
 DIQAILQLLQKQTTVVPAYSMVTAGAEYQRPI LRLRLTSHPRASIKTDRSFSPSSQCPEFLDLEKSKLK
 SKESLSSGKRLNTASEDNL TSLLKQSDASSELDPRQRKSYLHPIRHPSLPDSSLSTVGILGLHRHVS DP
 GLPGK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

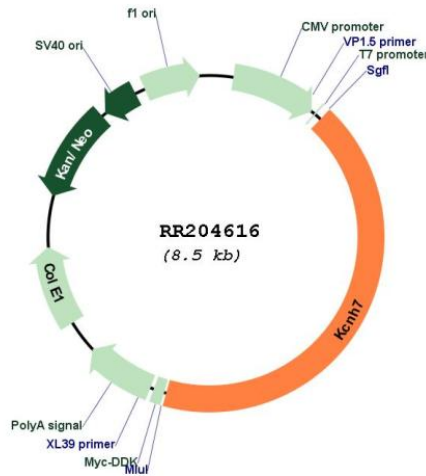
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_131912

ORF Size: 3585 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_131912.1](#), [NP_571987.1](#)

RefSeq Size: 3807 bp

RefSeq ORF: 3588 bp

Locus ID: 170739

UniProt ID: [O54852](#)

Cytogenetics: 3q21

MW: 134.9 kDa

Gene Summary: produces a current that has a large transient component at positive potentials [RGD, Feb 2006]