

## Product datasheet for **MG219261**

### **Kcnh1 (NM\_001038607) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Kcnh1 (NM_001038607) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kcnh1
Synonyms:	EAG1; Kv10.1; M-eag
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG219261 representing NM\_001038607  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGACCATGGCTGGCGGCCGGCGGGACTAGTGGCCCCGAGAACACGTTTCTGGAGAACATCGTGGCGG  
 GGTC AACGACACTAATTTTGTGTTGGGAATGCCAGATAGTCGACTGGCCATCGTGTACAGCAATGA  
 TGGATTCTGCAAGCTGTCTGGCTACCACCGGCCAGAAAGTATGCAAGAAAGCAGCGCCTGCAATTTATG  
 TATGGAGAGCTGACTGACAAGGACACAGTTGAAAAGGTTCCGACAGACCTTTGAGAACTACGAGATGAATT  
 CCTTCGAAATTTGATGTACAAGAAGAACAGGACACCTGTGTGGTTTTTTGTGAAGATCGCTCCGATCAG  
 GAACGAACAGGATAAAGTGGTCTGTTCCTTTGCACTTTGAGCAGACATAACTGCATTCAAGCAGCCCATC  
 GAGGACGACTCCTGCAAAGTTGGGGAAAGTTGCCGACTGACCAGAGCTCTGACAAGCAGCAGGGGAG  
 TCCTGCAGCAGCTGGCCCCAGTGTACAGAAGGGTGAAGATGTTACAAGCACTCGCCCTGGCAGAGGT  
 CCTGCAGCTGGGTTGAGACATCCTTCCCAGTACAAGCAAGAGGGCCAAAGACACCCCTCACATCATC  
 CTACACTACTGTGCTTTAAGACCACGTGGGATTGGATCATCTTGATCCTGACCTTCTACACAGCCATCT  
 TGGTCCCTTACAACGTCTCCTTTAAAACCAGGCAGAATAATGTGGCCTGGCTGGTGGTGGACAGCATCGT  
 GGATGTACATTTTTTGGTGGACATTGTTTTGAATTTTACACCACCTTTGTGGGCCAGCGGGGGAAGTG  
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 AGTTGTGGCGCTGCTCCGTCTCGGGCAGTGGCCCGAAACTGGATCATTACATCGAGTATGGAGCCCGG  
 GTACTGGTCTGTTGGTGTGCGTGTGGGCTTGTGCCACTGGATGGCCTGCATCTGGTACAGCATTG  
 GGACATGAGACTTTTATGAAAGACCAAGACCATCCGCAACAACAGCTGGCTCTACCAATGGCATT  
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 CTTTGGGAACGTGACAACATTTTCCAGCAGATGTACGCCAACCAACAGGTACCACGAGATGCTCAAC  
 AGTGTCCGGGATTTCTGAAGCTCTACCAGGTGCCAAAGGGCTGAGTGAAGCGGTCATGGACTACATTG  
 TGTCACCTGGTCCATGTCCGAGGCATCGACACAGAGAAGTCTGCAGATCTGCCCAAGGACATGCG  
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 GGCTGCCTGCGGGCCTTGCCATGGAGTCCAGACAGTGCAGTGTGCCAGGGGACCTCATCTATCATG  
 CTGGAGAGAGTGTGGACAGCCTCTGCTTGGTCTCAGGCTCCCTGGAGGTGATCCAGGATGACGAGGT  
 GGTGGCCATCCTAGGAAAGGAGACGTGTTTGGGGATGTTTTCTGGAAGGAAGCTACCCTTGACAGTCC  
 TGTGCTAATGTCCGGCCTTGACCTACTGTGACCTGCAGTGTCAAGAGGGACGCCCTTCCAGAAAGTGC  
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 GATTGTGTTCCGGAAGATCAGCGACGTGAAACGAGAAGAGGAGGAGAGGATGAAACGGAAGAACGAGGCC  
 CCCCTTATCCTGCCTCCTGACCACCCGTCAGAAGACTTCCAAAGGTTCCGCCAGCAGAAAGAAGCCA  
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 TGGACAATGTGGGTGAGACCAGGAGTCTCAGGACCGGAGCCCATCTTGGGTGAGGTCAAGCATTCTTT  
 CTACCCCATCCCTGAGCAGACGCTGCAGGCCACAGTGTGGAGGTGAAATATGAGCTGAAGGAGGATATC  
 AAGGCCCTGAATGCCAAAATGACCTCCATTGAGAAGCAGCTGTCTGAGATACTCAGGATACTAATGTCCA  
 GAGGGTCCGCCAATCTCCTCAGGAGACGGGTGAGATCTCCAGGCCCCAGTCCCAGAGTCAAGACAGAGA  
 CATTTTTGGAGCAAGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG219261 representing NM\_001038607  
 Red=Cloning site Green=Tags(s)

MTMAGRRRLVAPQNTFLENIVRRSNDTNFVLGNAQIVDWPPIVYSNDGFCKLSGYHRAEVMQKSSACSFMYGELTDKDTVEKVRQTFENYEMNSFEILMYKKNRTPVWFFVKIAPIRNEQDKVVLFLCTFSDITAFKQPIEDDSCKGWGKFARLTRALTSSRGLVQLAPSVQKGENVHKHSRLAEVLQLGSDILPQYKQEAPKTPPHIILHYCVFKTTWDWIILILTFYTAILVPYNVSFKTRQNNVAWLVDVSDVDFLVDIVLNFHTTFVGPAGEVISDPKLI RMNYLKTWFVIDLLSCLPYDVINAFENVDEGISSLFSSLKVVRLRLGRVARKLDHYIEYGAAVLVLLVCFVGLAAHWMACIWYSIGDYEIFDEDTKTIRNNSWLYQLALDIGTPYQFNGSGSGKWEVGGPSKNVYISSLYFTMTSLTSVGFNGNIAPSTDIEKIFAVAIMMIGSLLYATIFGNVTTIFQQMYANTNRYHEMLNSVRDFLKLQVPKGLSERVMDYIVSTWSMRGIDTEKVLQICPKDMRADICVHLNRKVFKEHPAFRLASDGCLRALAMEFQTVHCAPGDLIYHAGESVDSL CFVVSLSLEVIQDDEVVAILGKGDVFGDVFWEATLAQSCANVRALTYCDLHVIKRDALQKVFLEYSAFHSFSRNLILTYNLRKRIVFRKISDVKREEEERMKRKNEAPLILPPDHPVRRLFQRFQKQEARLAAERGGRLDLDLVEKGNALTDHTSANHSLVKASVTVRESPATPVSFQAATTSTVSDHAKLHAPGSECLGPKAVSCDPAKRKGWARFKDACGKGEDWNKVSKAESMETLPERTKAPGEATLKKTDSCDSGITKSDLRLDNVGETRSPQDRSPILA EVKHSFYPIPEQTLQATVLEVYKELKEDIKALNAKMTSIEKQLSEILRILMSRGSQSPQETGEISRPQSPESDRDIFGAS

TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

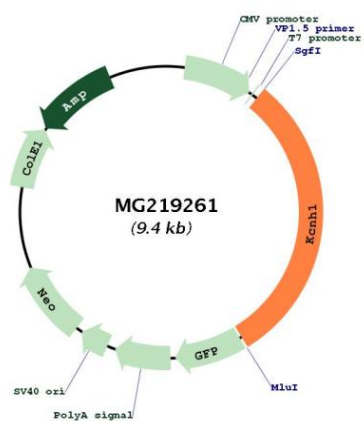


**ACCN:** NM\_001038607

**ORF Size:** 2886 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_001038607.1</a> , <a href="#">NP_001033696.1</a>
<b>RefSeq Size:</b>	7062 bp
<b>RefSeq ORF:</b>	2889 bp
<b>Locus ID:</b>	16510
<b>Cytogenetics:</b>	1 H6
<b>Gene Summary:</b>	Pore-forming (alpha) subunit of a voltage-gated delayed rectifier potassium channel (PubMed:19671703, PubMed:23975098). Channel properties are modulated by subunit assembly. Mediates IK(NI) current in myoblasts. Involved in the regulation of cell proliferation and differentiation, in particular adipogenic and osteogenic differentiation in bone marrow-derived mesenchymal stem cells (MSCs) (By similarity).[UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for MG219261