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Product datasheet for SC125548

GJA1 (NM_000165) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GJA1 (NM_000165) Human Untagged Clone
Tag:	Tag Free
Symbol:	GJA1
Synonyms:	AVSD3; CMDR; CX43; EKVP; EKVP3; GJAL; HLHS1; HSS; ODDD; PPKCA
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC125548 sequence for NM_000165 edited (data generated by NextGen Sequencing)

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ATGGGTGACTGGAGCGCCTTAGGCAAACTCCTTGACAAGGTTCAAGCCTACTCAACTGCT
GGAGGGAAGGTGTGGCTGTCAGTACTTTTCATTTTCCGAATCCTGCTGCTGGGGACAGCG
GTTGAGTCAGCCTGGGGAGATGAGCAGTCTGCCTTTCGTTGTAACACTCAGCAACCTGGT
TGTGAAAATGTCTGCTATGACAAGTCTTTCCCAATCTCTCATGTGCGCTTCTGGGTCCTG
CAGATCATATTTGTGTCTGTACCCACACTCTTGTACCTGGCTCATGTGTTCTATGTGATG
CGAAAGGAAGAGAAACTGAACAAGAAAGAGGAAGAACTCAAGGTTGCCCAAACTGATGGT
GTCAATGTGGACATGCACTTGAAGCAGATTGAGATAAAGAAGTTCAAGTACGGTATTGAA
GAGCATGGTAAGGTGAAAATGCGAGGGGGGGTTGCTGCGAACCTACATCATCAGTATCCTC
TTCAAGTCTATCTTTGAGGTGGCCTTCTTGCTGATCCAGTGGTACATCTATGGATTCAGC
TTGAGTGCTGTTTACACTTGCAAAAGAGATCCCTGCCCACATCAGGTGGACTGTTTCCTC
TCTCGCCCCACGGAGAAAACCATCTTCATCATCTTCATGCTGGTGGTGTCCTTGGTGTCC
CTGGCCTTGAATATCATTGAACTCTTCTATGTTTTCTTCAAGGGCGTTAAGGATCGGGTT
AAGGGAAAGAGCGACCCTTACCATGCGACCAGTGGTGCGCTGAGCCCTGCCAAAGACTGT
GGGTCTCAAAAATATGCTTATTTCAATGGCTGCTCCTCACCAACCGCTCCCCTCTCGCCT
ATGTCTCCTCCTGGGTACAAGCTGGTTACTGGCGACAGAAACAATTCTTCTTGCCGCAAT
TACAACAAGCAAGCAAGTGAGCAAAACTGGGCTAATTACAGTGCAGAACAAAATCGAATG
GGGCAGGCGGGAAGCACCATCTCTAACTCCCATGCACAGCCTTTTGATTTCCCCGATGAT
AACCAGAATTCTAAAAAACTAGCTGCTGGACATGAATTACAGCCACTAGCCATTGTGGAC
CAGCGACCTTCAAGCAGAGCCAGCAGTCGTGCCAGCAGCAGACCTCGGCCTGATGACCTG
GAGATCTAG
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Clone variation with respect to NM_000165.3

View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000165 unedited
TAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCCTCGTGCCGAATTCGGC
ACGAGTATCAGCACTTTTCTTTCATTAGGGGGAAGGCGTGAGGAAAGTACCAAACAGCAG
CGGAGTTTTAAACTTTAAATAGACAGGTCTGAGTGCCTGAACTTGCCTTTTCATTTTACT
TCATCCTCCAAGGAGTTCAATCACTTGGCGTGACTTCACTACTTTTAAGCAAAAGAGTGG
TGCCCAGGCAACATGGGTGACTGGAGCGCCTTAGGCAAACTCCTTGACAAGGTTCAAGCC
TACTCAACTGCTGGAGGGAAGGTGTGGCTGTCAGTACTTTTCATTTTCCGAATCCTGCTG
CTGGGGACAGCGGTTGAGTCAGCCTGGGGAGATGAGCAGTCTGCCTTTCGTTGTAACACT
CAGCAACCTGGTTGTGAAAATGTCTGCTATGACAAGTCTTTCCCAATCTCTCATGTGCGC
TTCTGGGTCCTGCAGATCATATTTGTGTCTGTACCCACACTCTTGTACCTGGCTCATGTG
TTCTATGTGATGCGAAAGGAAGAGAAACTGAACAAGAAAGAGGAAGAACTCAAGGTTGCC
CAACTGATGGTGTCAATGTGGACATGCACTTGAAGCAGATCGAATAAAAGAAGTTCAAGT
ACGGTATTGAAGAGCATGGNTAGGTGAAATGCGAGGGGGGGGGGTTGCTGCNAACCTACAT
CATCAGTATCCTCTTCAGTCATTTTTTGAGGGTGCCTCTTGCTGATNCCAGTGGACATCT
ATGGATTCNCTTGGGAGGGCTGGTTACACTGCAAAAAAGACCCTGCACATCAGGGGGGGC
CGTGTTCCTCTCTCGCCCACGGAGAAACATCTCATATTCTGCCGGGGGGGGGGGCNCCGTG
GGGGCCCTGGCCTGAAATAAATGACTCTTTTTGTTTTT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000165 unedited
GCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTATACTAAATTAAAACTT
TATTGAATAAAGAACACTCTCCAGAACACATGATCTGATGGACTAGGTCTACATTACATG
CAATGAAGCTGAACATGACCGTAGTTTAACATGGAATGTCAAACAAATTAGTAATTTTCA
TTGTACAAAACTGTTTATGTAGCTGACATGCATGCAAGAAGAAAAGTGTCATACTCAGCA
TTTTCACCAATCTTCTGTGATGAGTTTTAAAAAAGGCATTTGGAGAAACTGGTAGATGTC
TTCAACATATAGTTCAAATAAATTAGTTGTATGTGTACTACTGAATCCTCTTTCAACCTC
TCTTGCATTCCAAATAAAATCTTAGTGCAAACATCAAAGTTGCTGGTCACTCCAAAAGAC
TGCTAAACTCATAATAGAATACAAGTTCTGAATTACTGTGTATTAAGTAGGAAAACCCAA
GAATACCAGTTACTGCAAAATTCATTTAGGCACATTTAATAGTCCACTCTAAGCATTTTT
TCTAAGTCTCTCACATTAATGACTAAAGCCTGTTTACAGTACTAAAATTCTATCATTCAA
GCATCAATGATTACATTTCAGAAAAAGGAAATTCATTTCAGTAATAGCATTACTGCTATA
TCCTANAAAAAGGAGAGAAAATAAAGAATCATAATTAACAAAACCAGTATCCATAATAGG
ATACACAGGGGAAAAACATTNTAGGAGAAANAAAAAGTGTGCTTTACTTGCCCAGCANGA
ATATATAATGTAAACACATATTGGCCACACACAAAAATCTGAGAAGGTTNCAATTTGACC
CATAGTGCATATTTTCAAACTGNGTTGNGAGTTTACTGATCTGGCTGACATACTGACAAC
AAACAACTCTCAACACTATATGATGGTATATAGCTGGCTGTTCCTGACTTACTAAA

Restriction Sites: NotI-NotI

ACCN: NM_000165

Insert Size: 2940 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
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_000165.2, NP_000156.1
RefSeq Size:	3088 bp
RefSeq ORF:	1149 bp
Locus ID:	2697
UniProt ID:	P17302
Cytogenetics:	6q22.31
Domains:	CNX, Connexin43
Protein Families:	Druggable Genome, Ion Channels: Other, Transmembrane
Protein Pathways:	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Gap junction
Gene Summary:	This gene is a member of the connexin gene family. The encoded protein is a component of gap junctions, which are composed of arrays of intercellular channels that provide a route for the diffusion of low molecular weight materials from cell to cell. The encoded protein is the major protein of gap junctions in the heart that are thought to have a crucial role in the synchronized contraction of the heart and in embryonic development. A related intronless pseudogene has been mapped to chromosome 5. Mutations in this gene have been associated with oculodentodigital dysplasia, autosomal recessive craniometaphyseal dysplasia and heart malformations. [provided by RefSeq, May 2014]