

## **Supplementary Materials For**

**Title: Identification of an endogenous glutamatergic transmitter system  
controlling excitability and conductivity of atrial cardiomyocytes.**

**This file includes:**

Supplementary information, Tables S1

**Table S1. List of primers used for quantitative PCR (qPCR).**

Gene	Species	Forward Primer	Reverse Primer
<i>Nppa</i>	Rat	CAACACAGATCTGATGGATTCA	CCTCATCTTCTACCGGCATC
<i>Gls</i>	Rat	GAATAAGATGGCTGGTAATGAATATG	ACACTTGCTGACTCACACG
<i>Gria1</i>	Rat	AGGCTGGTGGTGGTTGAC	ACATTGGCTCCGCTCTCC
<i>Gria2</i>	Rat	CAACACTGGAAGAGAAAGAATACC	TCACTTGGACAGCATCATAACG
<i>Gria3</i>	Rat	TTATACAACACCAACCAGAACAC	ATAGAATCCAAAGATAGCATAACACC
<i>Gria4</i>	Rat	TTGTGATAGATTGTGAGATAGAGAG	TTGCGATGATATAATGGTAGCC
<i>Grik1</i>	Rat	CGGACTATGCGGCTATCAG	GAGGTTTGGCGTCTTTATTCCG
<i>Grik2</i>	Rat	CTGATGCTGCTCTGATGTATG	CTGCCTGTGAGACCTTCC
<i>Grik3</i>	Rat	CGAGGAGGAGAACAAGGAG	AACACGGACAGGACTAAGC
<i>Grik4</i>	Rat	GCTTCTGCTTGGCTCTTG	CGGTTGATGCGGTTCTTGG
<i>Grik5</i>	Rat	GCATCTGTCAGCCTGTATCC	GCGGTGATGGTGAAGGC
<i>Grin1</i>	Rat	CAGTGAGGAGGAGGAGGAAG	AAGTTGGCAGTGTAGGAAGC
<i>Grin2a</i>	Rat	CAAGACAACAGTGGACAACAG	AGCAGGATGACAGAAGAATGG
<i>Grin2b</i>	Rat	TTATCTCTGTGTCTTATGATGAATGG	GCAGCAGTGGTGTATGATGG
<i>Grin2c</i>	Rat	GGTGATGATGTTTCGTGATGTG	GGTGAGGTTCTGGTTGTAGC
<i>Grin2d</i>	Rat	ACAACCAGCCGAGAGTG	GCGATGCCATAACCAGTG
<i>Grin3a</i>	Rat	AAACGTGTGGAGAAGAGCAGAT	TGGACCTAGGAAACAGAGACAAT
<i>Grin3b</i>	Rat	TGGCACTGTCTTCTTACTC	CACTTGGGCGTCTTACTGG
<i>Grina</i>	Rat	GAGCCCAGAAGAATATGTGTTTG	GGTGAGAATGTATAGGAAGATGTTG
<i>Grid1</i>	Rat	TGGACTTCAGCAAGCGATAC	CAACACGAATATGAGCACACC
<i>Grm1</i>	Rat	CCGAAGAAGATGAATTGGAAGAG	CAGAATGACAGAGGCGTAGG
<i>Grm2</i>	Rat	AATCTCCTGCGGCTGTTC	CCTGTCTCACCATAGTCACC
<i>Grm3</i>	Rat	CCAGAGAAGCGGGAAACAG	GAATGCCAACCAGATGATGC
<i>Grm4</i>	Rat	CCAGGACCAACGGACAC	CCAGCAGGCAGATGAGG
<i>Grm5</i>	Rat	CAATCTATTCTATGGCTTATGGACTC	GCTTCATCGCATCACAGAGG
<i>Grm6</i>	Rat	ACTACGAGGAGCAGAGGAC	AAGCCAGCCAGATAATACAGG
<i>Grm7</i>	Rat	TTGTGATTGATGCTGTCTATGC	TTCTTGCCGCTGCTTG
<i>Grm8</i>	Rat	TGGATTGGCTCTGATAGTTGG	ATTGTCACCGCTCCTTCTG
<i>Slc1a1</i>	Rat	TCATAGTCGTGCGGAAGAAC	AGCGGAATGTAAGTGAAGG
<i>Slc1a2</i>	Rat	ACGACACGAAGAACCACAG	CCGCCAGAGTTACCTTGC
<i>Slc1a3</i>	Rat	GCTTCTGATGCGGATGCTG	TGGATGATGATGACAATGATTATGC
<i>Slc1a4</i>	Rat	TGTTGCTCTGGCGTTCATC	TTGGAGACTGGAGGAGGTTCC
<i>Slc1a5</i>	Rat	CGGCAAGATTGTGGAGATG	AAGTAGATGAGAGGCAGAACC
<i>Slc1a6</i>	Rat	TTCTCCTCCATCCTCAGCAG	GGCACAGTCTCCTCAAAGC
<i>Slc1a7</i>	Rat	CTGTCTGTGCTGTCTGTCATC	GCGGCTGGAGGTCTTGG
<i>GLS</i>	Human	ACCTTTGAAATATGCCATTGCTG	GTTTGTGAATCTTAGTCCACTCG
<i>GRIA1</i>	Human	TGCTCAAGAAGAACGCCAATC	TGACAATCTCCAGACGGTAGG
<i>GRIA2</i>	Human	AGAGTGCGGAAGTCCAAAGG	GGTGTGCGATGCCATAGC
<i>GRIA3</i>	Human	TTACATTGGAGTCAGCGTAGTTC	CGAGGTTCTTCATTGTTGTCTTC
<i>GRIA4</i>	Human	GGTGTGTCAGCGTGGTCTTATTC	GGTCCTTCCTTTCCGTCCTC
<i>GRID1</i>	Human	TCCTCCTACACAGCCAAC	TACTCATATACAGCAGAATCCC
<i>GRIK1</i>	Human	TCTTGGTGTGGCTGCTCTC	GGTCTGTATGTGTGGAAGTCTCG

<i>GRIK2</i>	Human	AGGATAGTGGGAGGCATTTGG	TAAATCATCAGCAGAGTCAATAGGG
<i>GRIK3</i>	Human	TATCGTGTCCGTGTGCTACC	ACAATTCGTCCAGTTAATCCTTCC
<i>GRIK4</i>	Human	CCAGAGCCTCAACCAGTCC	CGCAGTCAACCACAGCATAG
<i>GRIK5</i>	Human	CGCCAACGCCTCCATCTC	GTCCTCCACAATACCGTCCAG
<i>GRIN1</i>	Human	GTGCCTCAGTGTGCTACG	TCGCCCATCATCCCATTCC
<i>GRIN2A</i>	Human	GTTTGTGGGTGATGGTGAGATG	AGATGAAGGTGATGAGGCTAAGG
<i>GRIN2B</i>	Human	CACCACTGCTGCTTCTGAC	CCCTTTCCACTTCTCTCC
<i>GRIN2C</i>	Human	GGGACGGAGAGACACAGAAAC	CCAGGCCGAAGACCAGCAG
<i>GRIN2D</i>	Human	GGCTTCCACCGCTACTACG	CTCGGCTGGCTCCTTGTC
<i>GRIN3A</i>	Human	TCATCAACATCACCGCTAACC	GTCCTCAGTTCCTCCACATTC
<i>GRIN3B</i>	Human	CGAGCACGCCTTCTTCCG	CCTTGCCGTCTCCTCCTTC
<i>GRINA</i>	Human	CTTCATCCGCAAGGTGTTCC	AGACAGCATAGGAGACATAGTAGG
<i>GRM1</i>	Human	CTCTTCCGTGGCTCTGG	GCAATGGGCTTCTTAGTCC
<i>GRM2</i>	Human	CTGGTGTTATTGGCGGTTCC	GCGGGCAAAGTAGTCATAGC
<i>GRM3</i>	Human	GCAGGAGAGCATCATCAAGG	GCGGTGGTTGTTGTAGGG
<i>GRM4</i>	Human	CGAGAAGGATGGCACAGAG	TGAAGCACCGATGACACC
<i>GRM5</i>	Human	GCTGGCATTCCGCTGTG	GCGGAAGGAAGAGGAGGAG
<i>GRM6</i>	Human	CCAGGAGAGTTCAGCAAGG	TGAGCCGACCCACAGG
<i>GRM7</i>	Human	TTCTTGGGCTTGGGTATGTG	ATGTTGGGCTTATGAGTCTGG
<i>GRM8</i>	Human	CTCCTTTCCAACATCACTCTG	ATCTCCATTAGCACACTTCAC
<i>SLC1A3</i>	Human	GGACCTCTTCAAGTTCTGCCA	GGCAGCCAAAGCCTCATAGA
<i>GAPDH</i>	Human	AGCCACATCGCTCAGACAC	GCCCAATACGACCAAATCC

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