

SUPPLEMENTAL MATERIAL

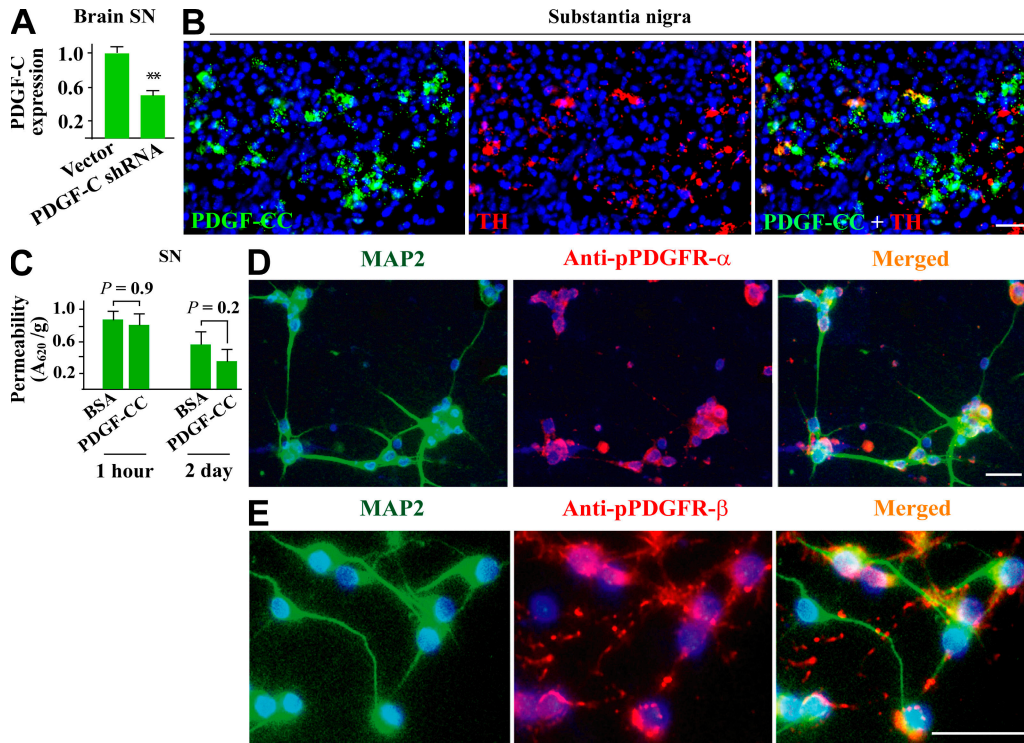
Tang et al., <http://www.jem.org/cgi/content/full/jem.20091704/DC1>

Figure S1. *PDGF-C* shRNA knock-down efficiency, *PDGF-C* expression, and *PDGFR-α/β* expression/activation in primary cortical neurons. (A) *PDGF-C* shRNA treatment decreased *PDGF-C* expression level in SN to <50% of normal level. (B) *PDGF-C* gene delivery by in vivo transfection of a *PDGF-C* expression vector into SN led to *PDGF-C* overexpression (green) partially colocalized with TH⁺ signals (red; $n = 8$ mice). (C) *PDGF-CC* protein SN injection did not change blood vessel permeability in SN at different time points measured by EB extravasation assay ($n = 8$ mice). (D) Immunofluorescent staining using an antibody against phosphorylated *PDGFR-α* (red) detected phosphorylated *PDGFR-α* colocalized with MAP2⁺ staining (green, neuronal marker) in *PDGF-CC* protein-treated primary cortical neurons. (E) Immunofluorescent staining using an antibody against phosphorylated *PDGFR-β* (red) detected phosphorylated *PDGFR-β* colocalized with MAP2⁺ staining (green) in *PDGF-CC* protein-treated primary cortical neurons. Bars: (B, D, and E) 20 μm . **, $P < 0.01$. The data are represented as means \pm SEM of the number of determinations. All experiments were repeated independently once with similar results. Representative experiments are shown.

Table S1. Primers used for real-time PCR

Gene name	Accession no.	Orientation	Primer sequence (5' to 3')	Species
<i>API5</i>	XM_123850/NM_007466	Forward	TTAGGTTTCTGCCCAACACA	Mouse
<i>API5</i>	XM_123850/NM_007466	Reverse	CACTGTGAGAAGCTGGTGCT	Mouse
<i>Bad</i>	NM_007522	Forward	GAGGAGGAGCTTAGCCCTTT	Mouse
<i>Bad</i>	NM_007522	Reverse	AGGAACCCCTCAAACATCATCG	Mouse
<i>Bad</i>	NM_022698	Forward	GAAGATGAAGGGATGGAGGA	Rat
<i>Bad</i>	NM_022698	Reverse	AGGAACCCCTCAAATTCATCG	Rat
<i>Bak1 (Bak)</i>	NM_007523	Forward	ATATTAACCGCGCTACGAC	Mouse
<i>Bak1 (Bak)</i>	NM_007523	Reverse	AGGCGATCTTGGTGAAGAGT	Mouse
<i>Bak1 (Bak)</i>	NM_053812	Forward	CGTCTGGCCCTGTATGTCTA	Rat
<i>Bak1 (Bak)</i>	NM_053812	Reverse	CAACCACCTCTCTGTGCAAT	Rat
<i>Bax</i>	NM_007527	Forward	TAGCAAACCTGGTCTCAAGG	Mouse
<i>Bax</i>	NM_007527	Reverse	TCTTGGATCCAGACAAGCAG	Mouse
<i>Bax</i>	NM_017059	Forward	TAGCAAACCTGGTCTCAAGG	Rat
<i>Bax</i>	NM_017059	Reverse	TCTTGGATCCAGACAAGCAG	Rat
<i>Bbc3 (Puma)</i>	NM_133234	Forward	GTGTGGAGGAGGAGGAGTG	Mouse
<i>Bbc3 (Puma)</i>	NM_133234	Reverse	TCGATGCTGCTCTCTTGTGTC	Mouse
<i>Bbc3 (Puma)</i>	NM_173837	Forward	CGGAGACAAGAGAGCAACA	Rat
<i>Bbc3 (Puma)</i>	NM_173837	Reverse	CACCTAGTTGGGCTCCATTT	Rat
<i>BCL2L1</i>	NM_009743	Forward	TGACTTCAGCTGCCTCATT	Mouse
<i>BCL2L1</i>	NM_009743	Reverse	GTTCCACAGCTGCTCTGTA	Mouse
<i>Bcl2l11</i>	NM_009754	Forward	GAGATACGGATTGCACAGGA	Mouse
<i>Bcl2l11</i>	NM_009754	Reverse	ATTTGAGGGTGGTCTTCAGC	Mouse
<i>Bcl2l11</i>	NM_022612	Forward	CCAGGCCTTCAACCATTATC	Rat
<i>Bcl2l11</i>	NM_022612	Reverse	CTCATTGAACTCGTCTCCGA	Rat
<i>BDNF</i>	NM_007540_L1	Forward	GGACTCTGGAGAGCGTGAAT	Mouse
<i>BDNF</i>	NM_007540_R1	Reverse	ACCTTCTGGTCTCATCCAG	Mouse
<i>Bid</i>	NM_007544	Forward	AGACGAGCTGCAGACAGATG	Mouse
<i>Bid</i>	NM_007544	Reverse	GGTCCATCTCATCGCCTATT	Mouse
<i>Bid</i>	NM_022684	Forward	CCCACACTGGTGAGACAACCT	Rat
<i>Bid</i>	NM_022684	Reverse	TGTCGTTCTCCATGTCCTTA	Rat
<i>Bid3 (Hrk)</i>	NM_057130	Forward	GAAACCCCTGTGCTCTGGAG	Rat
<i>Bid3 (Hrk)</i>	NM_057130	Reverse	CGTCCCACCATCAACTCT	Rat
<i>Bid3 (Hrk)</i>	NM_007545	Forward	GAAACCCCTGTGCTCTGGAG	Mouse
<i>Bid3 (Hrk)</i>	NM_007545	Reverse	TGCTGTGTTCCACCATCA	Mouse
<i>Bik</i>	NM_007546	Forward	CTCTGAGACTCCCAGCATGA	Mouse
<i>Bik</i>	NM_007546	Reverse	GACACAGGTCCATCTCATCG	Mouse
<i>Bik</i>	NM_053704	Forward	AGCTTGATTGGAAGCCTCAC	Rat
<i>Bik</i>	NM_053704	Reverse	AAGAAGACCAGCAGCACCAT	Rat
<i>Bmf</i>	NM_138313	Forward	AGAGATGGAGCCACCTCAGT	Mouse
<i>Bmf</i>	NM_138313	Reverse	AACAGGTGAGCAGAGAGCAA	Mouse
<i>Bmf</i>	NM_139258	Forward	AAGATGATGTGTCCAGCCA	Rat
<i>Bmf</i>	NM_139258	Reverse	GTAAGCGGGAAGAGCTGAAG	Rat
<i>Casp12</i>	NM_009808	Forward	CAGCTCAGGAAATGGAGACA	Mouse
<i>Casp12</i>	NM_009808	Reverse	CCACAGATTCCTCCAGGAT	Mouse
<i>Casp12</i>	NM_130422	Forward	AGTTCCTCAGGGAATCCAGA	Rat
<i>Casp12</i>	NM_130422	Reverse	CCTTCCTTCTCCATCACTGG	Rat
<i>Casp2</i>	NM_007610	Forward	GGCTACAATGTCCATGTGCT	Mouse
<i>Casp2</i>	NM_007610	Reverse	CCACTACGCAGGAGTCTGTG	Mouse
<i>Casp2</i>	NM_022522	Forward	ATGGAAAGAACCATGCACAA	Rat
<i>Casp2</i>	NM_022522	Reverse	TTAAGGCAAGCATAGCCACA	Rat
<i>Casp3</i>	NM_009810	Forward	CAAGTCAGTGGACTCTGGGA	Mouse
<i>Casp3</i>	NM_009810	Reverse	CGAGATGACATTCAGTGCT	Mouse
<i>Casp3</i>	NM_012922	Forward	CAAGTCGATGGACTCTGGAA	Rat
<i>Casp3</i>	NM_012922	Reverse	GTACCATTGCGAGCTGACAT	Rat
<i>CASP7</i>	NM_007611	Forward	CGTCCACAATGACTGCTCTT	Mouse
<i>CASP7</i>	NM_007611	Reverse	TTCCCGTAAATCAGGTCCTC	Mouse
<i>Casp8</i>	NM_009812	Forward	CCCTACAGGGTCTGCTCTT	Mouse
<i>Casp8</i>	NM_009812	Reverse	CAGGCTCAAGTCATCTCCA	Mouse

<i>Casp8</i>	NM_022277	Forward	CAGGTTTCTGCCTACAGGGT	Rat
<i>Casp8</i>	NM_022277	Reverse	GCTCGAGTTGTCTTGACAGTT	Rat
<i>Casp9</i>	NM_015733	Forward	CACAGCAAAGGAGCAGAGAG	Mouse
<i>Casp9</i>	NM_015733	Reverse	TCTGAGAACCTCTGGCTTGA	Mouse
<i>Casp9</i>	NM_031632	Forward	TTCATGGTGGAGGTGAAGAA	Rat
<i>Casp9</i>	NM_031632	Reverse	AGCCATGAGAGAGGATGACC	Rat
<i>CLU</i>	NM_013492	Forward	GTAGGAGTGTCTGGGAGGGA	Mouse
<i>CLU</i>	NM_013492	Reverse	GCAAGTGCAGGCATTAGTGT	Mouse
<i>CNTF</i>	NM_053007/NM_170786	Forward	ACCACAGGCATATTTCTGTC	Mouse
<i>CNTF</i>	NM_053007/NM_170786	Reverse	GGTGGAAAGGATAATGCCCTA	Mouse
<i>Cradd</i>	XM_235061	Forward	TGCCTACAGGTGACTGGATG	Rat
<i>Cradd</i>	XM_235061	Reverse	GACAGTCCCAGAGACAGCAC	Rat
<i>Dcn</i>	NM_024129	Forward	CTCAAGGTCTGCCACTTCT	Rat
<i>Dcn</i>	NM_024129	Reverse	TCCACAACGGTGATGCTATT	Rat
<i>DCTN1</i>	NM_007835	Forward	GGAAGAGCAGCAAGATGACA	Mouse
<i>DCTN1</i>	NM_007835	Reverse	TAGGAGATGAGGCGACTGTG	Mouse
<i>Dedd2</i>	NM_207677	Forward	GCTGCTGAGCCAACTCCT	Rat
<i>Dedd2</i>	NM_207677	Reverse	TTGGAAGAAGAGCTGGGATT	Rat
<i>DIABLO</i>	NM_023232	Forward	AGGAGGAAGATGAGGTGTGG	Mouse
<i>DIABLO</i>	NM_023232	Reverse	TCAGCAGCCATCTCTGAAAG	Mouse
<i>EEF1E1</i>	NM_025380	Forward	GCGGACATCCTGCTGACTA	Mouse
<i>EEF1E1</i>	NM_025380	Reverse	ACTGGACAGATGTTGCCTGA	Mouse
<i>EIF2AK3</i>	NM_010121	Forward	GACCCCTCACATGGGA	Mouse
<i>EIF2AK3</i>	NM_010121	Reverse	GCCTTGCAAATTAGTGACAGA	Mouse
<i>EIF5A</i>	NM_181582	Forward	TACTTCGAAGACTGGCAAGC	Mouse
<i>EIF5A</i>	NM_181582	Reverse	GTCATTCGGTTTGATGTTGG	Mouse
<i>FAAH</i>	NM_010173	Forward	CCAGCTCTGGAGGACCTAAG	Mouse
<i>FAAH</i>	NM_010173	Reverse	GCATGTCTGGGTTTCTGTA	Mouse
<i>FAIM</i>	NM_011810	Forward	ACGTATGGTGCAATGGTCAG	Mouse
<i>FAIM</i>	NM_011810	Reverse	TTTCTCTTTCTGCTGCTCA	Mouse
<i>FKBP8</i>	NM_010223	Forward	CGTGTACAGGAAGAGCCTGA	Mouse
<i>FKBP8</i>	NM_010223	Reverse	GGCCGTAGCAGTACTTGGAG	Mouse
<i>Flt1</i>	NM_010228	Forward	GCTCTGATGACCGAACTCAA	Mouse
<i>Flt1</i>	NM_010228	Reverse	ATTCCACGATCACCATCAGA	Mouse
<i>Flt1</i>	NM_019306	Forward	CTCACAGCCACTCTCATCGT	Rat
<i>Flt1</i>	NM_019306	Reverse	ATACACGGTGCAAGTGAGGA	Rat
<i>GAL</i>	NM_010253	Forward	GAAGAGAGGTTGGACCCTGA	Mouse
<i>GAL</i>	NM_010253	Reverse	CACTTCCTGGTCTCCTTCC	Mouse
<i>GDNF</i>	NM_010275_L1	Forward	CCTCGAAGAGAGGGAATCG	Mouse
<i>GDNF</i>	NM_010275_R1	Reverse	ATAGCCCAAACCAAGTCAG	Mouse
<i>HIPK3</i>	NM_010434	Forward	GAAGGAGAGGCCAGA	Mouse
<i>HIPK3</i>	NM_010434	Reverse	ATCGCTGCTACTGCTAATGG	Mouse
<i>MAPK8</i>	AK030767/NM_016700	Forward	ATGCAAATCTTTGCCAAGTG	Mouse
<i>MAPK8</i>	AK030767/NM_016700	Reverse	AGGCTTTAAGTCCCGATGAA	Mouse
<i>MAPRE3</i>	NM_133350	Forward	CCCAGATCCTCGAGCTTAAC	Mouse
<i>MAPRE3</i>	NM_133350	Reverse	TGTTCTCGCTCATGTTCC	Mouse
<i>Mbd4</i>	NM_010774	Forward	CTCTACGATCTCCGTGCAAA	Rat
<i>Mbd4</i>	NM_010774	Reverse	AGATCCGGTAGGAGTCGTTG	Rat
<i>MDM4</i>	NM_008575	Forward	CCCCTAGCCCATCTGAAAT	Mouse
<i>MDM4</i>	NM_008575	Reverse	CAGCCAGCTTGAGAGACAAA	Mouse
<i>NFKBIA</i>	NM_010907	Forward	TACGAGCAAATGGTGAAGGA	Mouse
<i>NFKBIA</i>	NM_010907	Reverse	TTCTCTCGTGGATGATTGC	Mouse
<i>NGFR</i>	NM_033217	Forward	GACTAACCTAGGCCACCCAA	Mouse
<i>NGFR</i>	NM_033217	Reverse	CAGACGTGTTCCAGATGT	Mouse
<i>NOTCH1</i>	NM_008714	Forward	TAATGAGTGACAGCCAGAACC	Mouse
<i>NOTCH1</i>	NM_008714	Reverse	CATAGGGCAGTTCACAGTGG	Mouse
<i>NTF3</i>	NM_008742_L1	Forward	AAATAGTACACGGATGCCA	Mouse
<i>NTF3</i>	NM_008742_R1	Reverse	GGCAAACCTCTTTGATCCAT	Mouse
<i>NTF5</i>	NM_198190_L1	Forward	CCTGCGTCAGTACTTCTCG	Mouse
<i>NTF5</i>	NM_198190_R1	Reverse	AGGACTGCTTAGCCTTGTCAT	Mouse
<i>Olr1 (Lox-1)</i>	NM_133306	Forward	CAGCAGAATCAGAACCTCCA	Rat

<i>Olr1 (Lox-1)</i>	NM_133306	Reverse	CAGAAGCTCCTCCTGCTCTT	Rat
<i>PDCD4</i>	NM_011050	Forward	GAAATTGGATTCCGCATCT	Mouse
<i>PDCD4</i>	NM_011050	Reverse	TAACCGCTTCACTCCATTG	Mouse
<i>PDE1b</i>	NM_008800_L1	Forward	TGGCCCACTAAGAGATTTC	Mouse
<i>PDE1b</i>	NM_008800_R1	Reverse	TGAGGACAGGAAGAGGCTTT	Mouse
<i>PDGFR-α</i>	NM_008808_L1	Forward	CTCTTGGAGATAGACTCCGTAGG	Mouse
<i>PDGFR-α</i>	NM_008808_R1	Reverse	ACTTCTTCTCCTCGAATGG	Mouse
<i>PDGFR-β</i>	NM_008809_L1	Forward	AGCCAGAAGTAGCGAGAAGC	Mouse
<i>PDGFR-β</i>	NM_008809_R1	Reverse	GGCAGTATCCGTGATGATG	Mouse
<i>PDE1B</i>	NM_008800	Forward	TGGCCCACTAAGAGATTTC	Mouse
<i>PDE1B</i>	NM_008800	Reverse	TGAGGACAGGAAGAGGCTTT	Mouse
<i>PEA15</i>	NM_011063	Forward	AGAGGGTTCTTGAAGCCAGA	Mouse
<i>PEA15</i>	NM_011063	Reverse	ACCTTTAAGGCAAAGCTGGA	Mouse
<i>Plagl1</i>	NM_012760	Forward	CCGATGAAAGCAGATCTCAA	Rat
<i>Plagl1</i>	NM_012760	Reverse	ACTTCCCAAACCTTCTCT	Rat
<i>Pmaip1 (Noxa)</i>	NM_021451	Forward	GAGTGCACCCGACATAACTG	Mouse
<i>Pmaip1 (Noxa)</i>	NM_021451	Reverse	CTCGTCCTCAAGTCTGCTG	Mouse
<i>Pmaip1 (Noxa)</i>	NM_001008385	Forward	GAGTGCACCCGACATAACTG	Rat
<i>Pmaip1 (Noxa)</i>	NM_001008385	Reverse	ACTCGTCCTCAGGTCTGCT	Rat
<i>PPARD</i>	NM_011145	Forward	CAGCCTCAACATGGAATGTC	Mouse
<i>PPARD</i>	NM_011145	Reverse	TCCGATCGCACTTCTCATAC	Mouse
<i>Ppp1r3c</i>	NM_001012072	Forward	AACGCATCTCTCCAGCTT	Rat
<i>Ppp1r3c</i>	NM_001012072	Reverse	CTTGCAAAGAGCAGTTCTCG	Rat
<i>Prkdc</i>	XM_341020	Forward	GATGGGAAGAGCAAACCATT	Rat
<i>Prkdc</i>	XM_341020	Reverse	TTTCATCATGGCCTCGAATA	Rat
<i>RAD9</i>	NM_011237	Forward	ACAGTGATGGTGAAGGGTGA	Mouse
<i>RAD9</i>	NM_011237	Reverse	TCCATTTCCATGTCCATGTC	Mouse
<i>RAF1</i>	AK036317/NM_029780	Forward	GCATGCAAAGAACATCATCC	Mouse
<i>RAF1</i>	AK036317/NM_029780	Reverse	TTCAACCTGCTGAAACCAC	Mouse
<i>RRAGA</i>	NM_178376	Forward	TTGGTGATTTCCCACTACCA	Mouse
<i>RRAGA</i>	NM_178376	Reverse	TTCTCACTTCCATGCTCTG	Mouse
<i>SGK</i>	NM_011361	Forward	TTCTTACCCTTTGGTGGAG	Mouse
<i>SGK</i>	NM_011361	Reverse	GAGAGGAGGGTGTGCTCTTC	Mouse
<i>SKP2</i>	AK037002/NM_013787	Forward	ACCCGTGGCTAACAATCTTC	Mouse
<i>SKP2</i>	AK037002/NM_013787	Reverse	AAATGCTACCAGCCTCTGCT	Mouse
<i>SMPD1</i>	NM_011421	Forward	CTTGGAAACATCTCTTTGCCA	Mouse
<i>SMPD1</i>	NM_011421	Reverse	GTCTGTGCCCTCCAGGTA	Mouse
<i>SRA1</i>	NM_025291	Forward	TTCAACGATCACTCATGGTT	Mouse
<i>SRA1</i>	NM_025291	Reverse	TGCTGGTTCTCAGGTTCCA	Mouse
<i>TAF10</i>	NM_020024	Forward	GAGCAAGGATCGCAAGTACA	Mouse
<i>TAF10</i>	NM_020024	Reverse	GGGACAGAGGGAAAGACAAA	Mouse
<i>TEGT</i>	NM_026669	Forward	TCGGTTCTCACAGTCCAG	Mouse
<i>TEGT</i>	NM_026669	Reverse	GCCTGTGCCAGACTCAGTTA	Mouse
<i>TNF</i>	NM_013693	Forward	ATGAGAAGTCCCAAATGGC	Mouse
<i>TNF</i>	NM_013693	Reverse	CTCCACTTGGTGGTTTGCTA	Mouse
<i>TNF</i>	NM_012675	Forward	CAAGGAGGAGAAGTTCCCAA	Rat
<i>TNF</i>	NM_012675	Reverse	CTCTGCTTGGTGGTTTGCTA	Rat
<i>Tnfrsf12a</i>	NM_181086	Forward	ATGGACTGCGCTTCTTGTC	Rat
<i>Tnfrsf12a</i>	NM_181086	Reverse	CAGAATGGGCCATAGCATC	Rat
<i>Tp53 (p53)</i>	NM_030989	Forward	GCCGACCTATCTTACCATC	Rat
<i>Tp53 (p53)</i>	NM_030989	Reverse	CTTCTTCTGTACGGCGGTCT	Rat
<i>Tp53 (p53)</i>	NM_011640	Forward	ACAGTCGGATATGAGCATCG	Mouse
<i>Tp53 (p53)</i>	NM_011640	Reverse	CCATGGAATTAGGTGACCCT	Mouse
<i>TRAF5</i>	NM_011633	Forward	AGTCACACGGACAAGTCAGC	Mouse
<i>TRAF5</i>	NM_011633	Reverse	AGCTGGGTGATCCTCTGTTT	Mouse
<i>TRAF7</i>	NM_153792	Forward	CAATCAAGGTATGGGACACG	Mouse
<i>TRAF7</i>	NM_153792	Reverse	CACACAATGATGGTGACGTC	Mouse
<i>TRP53BP2</i>	NM_173378	Forward	ACCACGCCACTAAAGAAC	Mouse
<i>TRP53BP2</i>	NM_173378	Reverse	GCCTGGTGACTTAGATGGGT	Mouse
<i>Trp53inp1</i>	NM_181084	Forward	TCCTCAGCAGAGCACACTTC	Mouse and rat
<i>Trp53inp1</i>	NM_181084	Reverse	TCCATTGGACAGGACTCAAA	Mouse and rat

<i>UACA</i>	NM_028283	Forward	AGTACGACCAAGCGTGTGAG	Mouse
<i>UACA</i>	NM_028283	Reverse	CTCTGCTGCAGTCCATGAT	Mouse
<i>UBQLN1</i>	NM_152234/NM_026842	Forward	TTGGAACAGTGGGAATCAA	Mouse
<i>UBQLN1</i>	NM_152234/NM_026842	Reverse	AGTTGGACAGATGCAGGACA	Mouse
<i>UNC5C</i>	NM_009472	Forward	AGTCTGTCTGGCGATCACTG	Mouse
<i>UNC5C</i>	NM_009472	Reverse	AGATCTTGTCTGGCAGCCTT	Mouse
