

Supplemental Tables

Supplemental Table 1. Primers for PCR analysis

Transcript	Forward Primer	Reverse Primer
rat neuroligin-1	5'—gatggaccagcgagaacatt—3'	5'—atcgtacacaggtccaagg—3'
rat neuroligin-2	5'—tttctgctgggaattgtacc—3'	5'—cctgctatgcaaggaggaag—3'
rat neuroligin-3	5'—gacggggatgaagatgaaga—3'	5'—agccctcagagtgatgaga—3'
rat neurexin-1 α	5'—gcagatacccttcgactgga—3'	5'—tcatacattgtccactga—3'
rat neurexin-1 β	5'—gcacctcgagaagactgtcc—3'	5'—cggagcatcctctgtgtacat—3'
rat neurexin-2 α	5'—tcaacctgtccctcaagtcc—3'	5'—ggtgtaatcctcctgctgt—3'
rat neurexin-2 β	5'—gtctcgtccagcctcagc—3'	5'—gggagccatgtataggtga—3'
rat neurexin-3 α	5'—cattgtggagccagtgaatg—3'	5'—gcccaacataggaggagtc—3'
rat neurexin-3 β	5'—tgggagaagtccatcagtc—3'	5'—gcttctggtgacctactctg—3'
human neuroligin-1	5'—gttggccacaaaagtgtgt—3'	5'—ttgagtgaagatccgctgtg—3'
human neuroligin-2	5'—ggcttaaggacacagtgga—3'	5'—gattgtcgggattgtttgg—3'
human neuroligin-3	5'—caccctgtggtcctcagtt—3'	5'—cgtggatgtagacctgacg—3'
human neurexin-1 α	5'—cgacttctggagctgattc—3'	5'—agcacacacctccgttgag—3'
human neurexin-1 β	5'—cggctatgttccgattgt—3'	5'—tcaatggcgtatcactctg—3'
human neurexin-2 α	5'—ttgtcatcgagctggtcaag—3'	5'—tggcacaggactctcagtg—3'
human neurexin-2 β	5'—ccggcaggaaacttgataa—3'	5'—catctgttctgggtggtg—3'
human neurexin-3 α	5'—ctctggcaccatcaagtga—3'	5'—ttctgcagggttagctgtc—3'
human neurexin-3 β	5'—aaactcacctgaaccacttg—3'	5'—cccatcatagcaggaggaag—3'
mouse neuroligin-1	5'—ggggatgaggttcctatgt—3'	5'—ccgtggatggcactttagt—3'
mouse neuroligin-2	5'—tagcaggtgggagcagactt—3'	5'—agacacaagtgggagggttg—3'
mouse neuroligin-3	5'—acatggaaggaacaggcaac—3'	5'—agagccacttggatgatgg—3'
mouse neurexin-1	5'—agttgtacctgggtggttg—3'	5'—aaaccgttgcctctctca—3'
mouse neurexin-2	5'—caccaccagaacacagatg—3'	5'—tgttctcttggccttgcctt—3'
mouse neurexin-3	5'—tcctaaccacaacgggctac—3'	5'—ctcagtgtgctgaaagtcaa—3'

Supplemental Table 2. Primers and Taqman Probes for Real Time PCR Analysis in INS-1 Cells and Rat Islets.

Transcript	Forward Primer	Reverse Primer	Probe
Neuroligin-1	5'—tccatagctgctccacca—3'	5'—cggatatcagaccaggagatg—3'	5'—agaacatcgatttcagctccagaacca—3'
Neuroligin-2	5'—ggcagatgtagcctgatgac—3'	5'—cgccaatgagcatgttcgtagt—3'	5'—tgagatcctcatcaacagggagaattcc—3'
Neuroligin-3	5'—ggaagtagcctgtccaaatata—3'	5'—gatcacgacaccttggttca—3'	5'—cccggaccagctctactctcacatc—3'
Neurexin-1 α	5'—ttccgcaacaccactctctaca—3'	5'—ccctgcgcttgactga—3'	5'—cgctgaggccaagtgggtgga—3'
Neurexin-1 β	5'—gcgcaccacatccacat—3'	5'—gctggtgacctgtagattgcaat—3'	5'—catggcagcagcaagcatcattcagt—3'
Neurexin-2	5'—cacggatgacattacaattgatga—3'	5'—agcgcaccacgtgatattg—3'	5'—ccaacgccatctgtagcgacg—3'
Neurexin-3	5'—gaccagcacacgctctga—3'	5'—tgcgtactaagacaccatcctca—3'	5'—tcgccgtgggattcagcaca—3'
18s	5'—cgccgctagaggtgaaattc—3'	5'—ttggcaaatgctttcgtc—3'	5'—tgaccggcgcaagacggac—3'

Supplemental Table 3. Primers for Real Time PCR analysis of Human Islets.

Transcript	Forward Primer	Reverse Primer
Neurologin-1	5'—aatggatgatgtggaccactggt—3'	5'—agatggtggttctggaggctgaaa—3'
Neurologin-2	5'—ccgagcgtatcaccatctt—3'	5'—gcagacactccacagcttca—3'
Neurologin-3	5'—tcacctgcctacagcaacgagaat—3'	5'—aggccagaacgttaaggacagga—3'
Neurexin-1 α	5'—caacaatgtggaaggtctgg—3'	5'—atattgtcaccatagcgtgtc—3'
Neurexin-1 β	5'—cacatccaccatttccatgg—3'	5'—ttccctggtgtatatgcag—3'
Neurexin-2 α	5'—gtcaatggcaagtcaacga—3'	5'—cttatagaccacgtccttgag—3'
Neurexin-2 β	5'—ccaccactccacagcaag—3'	5'—gcgaagttgtgttaagtgtg—3'
Neurexin-3 α	5'—gcgaagttgtgttaagtgtg—3'	5'—ctgatatagtacgtatctgcca—3'
Neurexin-3 β	5'—tgtagcttctcctcctcca—3'	5'—accaagatgccatccttcac—3'
Beta-Actin	5'—tcatgaagtgtgacgttgacatccgt—3'	5'—cctagaagcatttgcggtcacgatg—3'
18s	5'—cgccgctagaggtgaaattc—3'	5'—ttggcaaatgctttcgctc—3'

Supplemental Table 4. Primers for Splice Site Analysis of Neurexin and Neurologin in INS-1 Cells and Human Islets.

Transcript	Forward Primer	Reverse Primer
rat nlg-1 flanking SSA	5'—tgtgcaagaccagagtgaaga—3'	5'—taccgtagcttccaacaca—3'
human nlg-1 flanking SSA	5'—ctcctgtgtgtcccagaat—3'	5'—cccactgtcccgaatatct—3'
rat nlg-1 internal SSA	5'—caccatctccctgtgtgat—3'	5'—atcttctgccgggtttct—3'
human nlg-1 internal SSA	5'—ctcctgtgtgtcccagaat—3'	5'—atatttctgccgggcttt—3'
rat nlg-1 flanking SSB	5'—gctgactttatcccattatctgaa—3'	5'—gctggaagggtgttccactctga—3'
human nlg-1 flanking SSB	5'—ctgcaaaggggaactatgga—3'	5'—actaacagcccagctggaaa—3'
rat nlg-1 internal SSB	5'—tggggtacttggcttcttg—3'	5'—ttgctccaacggttacctc—3'
human nlg-1 internal SSB	5'—ggtaaccgttgagcaattc—3'	5'—tgtggtatcgagctggtga—3'
rat nlg-2 flanking SSA	5'—tgtgtgtgtcaccgacaact—3'	5'—gccgtgtagaacagcatga—3'
human nlg-2 flanking SSA	5'—tgtgtgtgtcaccgacaact—3'	5'—tgagaaacagcatcacagg—3'
rat nlg-2 internal SSA	5'—tgtgtgtgtcaccgacaact—3'	5'—tatctgtgtctggcgattg—3'
human nlg-2 internal SSA	5'—ccatcatgctgctgtgtg—3'	5'—gattgagctcgctcgt—3'
rat nlg-1 flanking SSA1/2	5'—ttatccaggagcccacag—3'	5'—tcctggtatgtagaccatga—3'
human nlg-1 flanking SSA1/2	5'—ggtcactgccaactggat—3'	5'—cgtggtatgtagaccatgacg—3'
rat nlg-1 internal SSA1	5'—cccagaacatccacacagc—3'	5'—atcttctgttgggtttcg—3'
human nlg-1 internal SSA1	5'—tgtaaagcggattccaagg—3'	5'—cgtggtatgtagaccatgacg—3'
rat nlg-1 internal SSA2	5'—aagaacagggcgaggactt—3'	5'—atgacgatgacgttgcata—3'
human nlg-1 internal SSA2	5'—aagaacagggcgaggactt—3'	5'—ggtgatgacgatgacattgc—3'
rat nrxn-1 flanking SS4	5'—gcctgggtgactaccttgag—3'	5'—tgtggtggtctccatgattg—3'
human nrxn-1 flanking SS4	5'—acagatgacatgccattga—3'	5'—ccgcaattattatggttgc—3'
rat nrxn-1 internal SS4	5'—acagatgacatgccattga—3'	5'—aggcgtcttatcattgtt—3'
human nrxn-1 internal SS4	5'—acatgccattgaagaatcc—3'	5'—ccattcatcaactactcgacca—3'

Supplemental Table 5. Neurologin-2 SiRNA Pool

SiRNA #	Sense	Antisense (5'P on all)
1	5'—gagcuaagcgugacuguagu—3'	5'—cuacagucacgcuuagcucu—3'
2	5'—gcacggaagcugugaaugu—3'	5'—cauuccacagcuuccgugcu—3'
3	5'—gcgagcagucagaccuauu—3'	5'—uaggucagucacugcgcuu—3'
4	5'—guauggagcaagucaacu—3'	5'—uguugaacuugcucacu—3'