## Girdin 3'-UTR (NM\_001135597) sequence

tcagtttctcagtatgaagcctttatttctgaagtaacaagacacctagcaactataggaatcattttaaaaaatctttaaggagacttttaacagtccttcgtaagccaattattttgatgcaaaagaaattcagtttataagataaatctgaaaaatccataatgaaataggagttataaaaaatttatagtgatattaatctttccat attte ccatta ageaa cacta ageatte at a agtta acceat g g ta a aget g ttttte c gaa act tttttt ag ta ag at g g ttttte agea a at g g catter and a g catter agea act g g ta ag a g catter agea act g g catter ag a g catter agea act g g catter agea act g g catter ag a g catter ag attatggcaaaaataatgtaaataagttactatgatctgcattttgccagaaactcatttataattaaggctatcatttattaatgatttttttctcctttatgatattagaaacatcaattttttttagtagttccaattttatatcacagttttattttcttatgaaatcaaaaaatgcattgatactcattaatgcaaattcattatttaacatcaa tatcagagtaatcttcaaggtctgaaatgagaaacatactgactttttaaaattttaacagtgtacttcttaggctttcattaccagctctgaagaactttttggatggaacttagagaacttgagettacttacgtacttcaatgccaccggtaacttaggttttaccaccaaatgctgttaacgttaaatcattttgaaaatcttggatgaaaggtgctatgtaaatggaaatacaaaggattettactaacatacaaaaataatgcacaacagaaatatetaaaacetttteegtagactttgaaa cate tete tete cata a acte cet gg at tea agtag ca cat t gg ta at agg cag tetag aga ca at t ge aga cat t geatcceagaacaattactgaaaagctgaaatttaatgggtggtgatgtagcccaatgagggcgaatgacattacagcttgacctctccagaacactaatagaaacgactagacagtagtaaccacatgaatattttactttctccagtataccttgagaagcaaactttgtaggaagccactcttctcccctaaacaacttccagtagaagcaactttgaggaagccactcttctcccctaaacaacttccagtagaagcaactttgaggaagccactcttctcccctaaacaacttccagtagaagcaaactttgaggaagccactcttctcccctaaacaacttccagtagaagcaaactttgaggaagccactcttctccccctaaacaacttccagtagaagcaaactttgaggaagccactcttctccccctaaacaacttccagtagaagcaaactttgaggaagccactcttctccccctaaacaacttccagtagaagcaaactttgaggaagccactcttctccccctaaacaacttccagtagaagcaaactttgaggaagccactcttctccccctaaacaacttccagtagaagccaactttgaggaagccactcttctccccctaaacaacttccagtagaagcaactttgaggaagccactcttctccccctaaacaacttccagtagaagcaactttgaggaagccactcttctccccctaaacaacttccagtagaagcaactttgaggaagccactcttctccccctaaacaacttccagtagaagcaactttgaggaagccactcttctccccctaaacaacttccagtagaagcaactttgaggaagccactcttctccccctaaacaacttccagtagaagcaactttgaggaagcaactttgaggaagccactcttctccccctaaacaacttccagtagaagcaactttgaggaagcaactttgaggaagccactcttctccccctaaacaacttccagtagaagcaactttgaggaagcaactttgaggaagccactcttctccccctaaacaacttcagaagcaactttgaggaagcaactttgaggaagcaactttgaggaagcaacttgaggaagcaactttgaggaagcaactttgaggaagcaactttgaggaagcaactttgaggaagcaactttgaggaagcaactttgaggaagcaacttgaggaagcaactttgaggaagcaacttgatgccaaacaataataaagccaactggaaacgaatcggagccattttcattttcctaaccggggcctgacatgctttaaattatctggctgtattctaaatcaaatcaactgaactgaactgaactggaactgaaacaccta accect caaggaa act gaagaat caata ta cagggta at agett t get cagaget ccaata at gtgett cagatet gte cat gtg gaaat gaagaat caata ta cagggta at aget t get cagaget ccaata at gtget cagaget gaagaat gaagaatcttt catccaa atttttaa attggtggttaccaa agagttcacaa aacaggtttgtatgtagcacctttcatgcaaggcatgcaa aaaggcctattttaa aattggtggtaccaaggcatgcaa agaggcatgcaa agaggatgcaa agaggatgagatgtattttttctttaagtcttgaatgaatacaaaaggagcccattttataatataaaccttgatgtacatgttgagatatttggacaatgaaaatgcctttgttt attacttgg caatacctgat g t cag g catca ag caact cat g ac ag a gataccact g ttt g ttt ttt taa aa aa ac att ttt catt tt g tt tc tc ct tc a track g caatac ag a gataccact g tt g tt tt tt taa aa aa ac att tt tc att tt g tt tc tc ct tc a track g caatac ag a gataccact g tt g tt tt tt taa aa aa ac att tt tc att tt g tt tc tc ct tc a track g caatac ag a gataccact g tt g tt tt tt taa aa aa ac att tt tc att tt g tt tc tc ct tc a track g caatac ag a gatac ac ac t g tt g tt tt tt taa aa aa ac att tt tc att tt g tt tc ct tc a track g caatac ag a gatac ac ac t g tt g tt tt tt taa aa aa ac att tt tc att tt g tt tc ct tc a track g caatac ag a gatac ac ac t g tt g tt tt tt taa aa aa ac att tt tc att tt g tt tc ct tc a track g caatac ag a gatac ac ac t g tt g tt tt tt taa aa aa ac att tt tc att tt g tt tc ct tc a track g caatac ac a gatac ac ac a gat

**Supplement Figure.1** This is the sequence of Girdin 3'-UTR. Sequences with a grey background represent the position of primers, while underlined sequences represent the two possible binding sites of miR-101.

Girdin-3'-UTR-1-F: <u>CTCGAG</u>CAGGCAAGAAATACAAACC (Xho I) Girdin-3'-UTR-1-R: <u>GCGGCCGC</u>GCTAACCAAATAAGGCTCT (Not I) Mut-Girdin-3'-UTR-1-F: <u>GCGGCCGC</u>CAGGCAAGAAATACAAACC (Not I) Mut-Girdin-3'-UTR-1-R: <u>CTCGAG</u>GCTAACCAAATAAGGCTCT (Xho I)

Girdin-3'-UTR-2-F: <u>CTCGAG</u>TTGTATGTAGCACCTTTC (Xho I) Girdin-3'-UTR-2-R: <u>GCGGCCGC</u>CATTGTCCAAATATCTCAA (Not I) Mut-Girdin-3'-UTR-2-F: <u>GCGGCCGC</u>TTGTATGTAGCACCTTTC (Not I) Mut-Girdin-3'-UTR-2-R: <u>CTCGAG</u>CATTGTCCAAATATCTCAA (Xho I)

Supplement Figure.2 The sequences of Girdin and Girdin-Mut.