**circRNA12542 circCDKN2B-AS1 chr9:22046750-22097363**

**2、3、4 exons of CDKN2B-AS1 transtripts variants 4**

TGTCCCTTTTGATGAGAAGAATAAGCCTCATTCTGATTCAACAGCAGAGATCAAAGAAAAGACTTCTGTTTTCTGGCCACCAGATATATGTTATCTGTGCTTAAAGAATTGAAAAACACACATCAAAGGAGAATTTTCTTGGAAAGAGAGGGTTCAAGCATCACTGTTAGGTGTGCTGGAATCCTTTCCCGAGTCAGTACTGCTTTCTAGAAGAAAACCGGGGAGATCTATTTGGAATGTATCTAACTCCAAAGAAACCATCAGAGGTAACAGGTGGAGAACTTCAGTAGAGGAAGTGGCAGGAATTTGGGAATGAGGAGCACAGTGATTAAACTGGGGCCATTCATATGAGAGTTTAAGAACTCAGACCAGTGACTTAG

**Sanger sequencing of products amplified by divergent primers**

T6-1\_M13F\_TSS20170915-0571-1747\_A07

GCGACGTCTGAGCTTGATATCGAATTCGCGTGTCGCCCTTTCAGTAGAGGAAGTGGCAGGAATTTGGGAATGAGGAGCACAGTGATTAAACTGGGGCCATTCATATGAGAGTTTAAGAACTCAGACCAGTGACTTAGTGTCCCTTTTGATGAGAAGAATAAGCCTCATTCTGATTCAACAGCAGAGATCAAAGAAAAGACTTCTGTTTTCTGGCCACCAGATATATGTTATCTGTGCTTAAAGAATTGAAAAACACACATCAAAGGAGAATTTTCTTGGAAAGAGAGGGTTCAAGCATCAAAGGGCGACACGCGAATTCGATATCGCGGCCGCCTGCAGTCAATACTGACGATGGTCATAGCTGTTTCCTGTCCATAGCAGAAAGTCAAAAGCCTCCGACCGGAGGCTTTTGACTTGATCGGCACGTAAGAGGTTCCAACTTTCACCATAATGAAATAAGATCACTACCGGGCGTATTTTTTGAGTTATCGAGATTTTCAGGAGCTAAGGAAGCTAAAATGAGTATTCAACATTTCCGTGTCGCACTTATTCCGTTTTTTGCGGCATTTTGCCTTCCTGTTTTTGCTCACCCAGAAACGCTGGTGAAAGTAAAAGATGCTGAAGATCAGTTGGGTGCACGAGTGGGTTACATCGAACTGGATCTCAACAGCGGTAAGATCCTTGAGAGTTTTCGCCCCGAAGAACGTTTTCCAATGATGAGCACTTTTAAAGTTCTGCTATGTGGCGCGGTATTATCCCGTATTGACGCCGGGCAAGAGCAACTCGGTCGCCGCATACACTATTCTCAGAATGACTTGGTTGAGTACTCACCAGTCACAGAAAAGCATCTTACGGATGGCATGACAGTAAGAGAATTATGCAGTGCTGCCATAACCATGAGTGATAACACTGCGGCCAACTTACTTCTGACAACGATCGGAGGACCGAAGGAGCTAACCGCTTTTTTGCCCACATGGGGGATC

T6-2\_M13R\_TSS20170915-0571-1747\_G08

GATGCGGACGCGATATCGAATTCGCGTGTCGCCCTTTCAGTAGAGGAAGTGGCAGGAATTTGGGAATGAGGAGCACAGTGATTAAACTGGGGCCATTCATATGAGAGTTTAAGAACTCAGACCAGTGACTTAGTGTCCCTTTTGATGAGAAGAATAAGCCTCATTCTGATTCAACAGCAGAGATCAAAGAAAAGACTTCTGTTTTCTGGCCACCAGATATATGTTATCTGTGCTTAAAGAATTGAAAAACACATATCAAAGGAGAATTTTCTTGGAAAGAGAGGGTTCAAGCATCAAAGGGCGACACGCGAATTCGATATCAAGCTTCAGGACTGCAGCGAGCCTCAGACACTGGCCGTCGTTTTACACAATCAACTCACTGGCTCACCTTCACGGGTGGGCCTTTCTTCGGTAGAAAATCAAAGGATCTTCTTGAGATCCTTTTTTTCTGCGCGTAATCTGCTGCTTGCAAACAAAAAAACCACCGCTACCAGCGGTGGTTTGTTTGCCGGATCAAGAGCTACCAACTCTTTTTCCGAGGTAACTGGCTTCAGCAGAGCGCAGATACCAAATACTGTTCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAACTCTGTAGCACCGCCTACATACCTCGCTCTGCTAATCCTGTTACCAGTGGCTGCTGCCAGTGGCGATAAGTCGTGTCTTACCGGGTTGGACTCAAGACGATAGTTACCGGATAAGGCGCAGCGGTCGGGCTGAACGGGGGGTTCGTGCACACAGCCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATACCTACAGCGTGAGCTATGAGAAAGCGCCACGCTTCCCGAAGGGAGAAAGGCGGACAGGTATCCGGTAAGCGGCAGGGTCGGAACAGGAGAGCGCACGAGGGAGCTTCCAGGGGGAAACGCCTGGTATCTTTATAGTCCTGTCGGGTTTCGCCACCTCTGACTTGAACATCGATTTTTGGGATGCTCGTCAGGGGGGCGGAACCCATGGAAAAA

**Sanger sequencing of products amplified by full-length primers**

>TW5\_TSS20171130-0571-3655.seq.Contig1

GTAGAGGAAGTGGCAGGAATTTGGGAATGAGGAGCACAGTGATTAAACTG

GGGCCATTCATATGAGAGTTTAAGAACTCAGACCAGTGACTTAGTGTCCC

TTTTGATGAGAAGAATAAGCCTCATTCTGATTCAACAGCAGAGATCAAAG

AAAAGACTTCTGTTTTCTGGCCACCAGATATATGTTATCTGTGCTTAAAG

AATTGAAAAACACACATCAAAGGAGAATTTTCTTGGAAAGAGAGGGTTCA

AGCATCACTGTTAGGTGTGGTGGAATCCTTTCCCGAGTCAGTACTGCTTT

CTAGAAGAAAACCGGGGAGATCTATTTGGAATGTATCTAACTCCAAAGAA

A

>TW7\_TSS20171130-0571-3655.seq.Contig1

TTCAGTAGAGGAAGTGGCAGGAATTTGGGAATGAGGAGCACAGTGATTAA

ACTGGGGCCATTCATATGAGAGTTTAAGAACTCAGACCAGTGACTTAGTG

TCCCTTTTGATGAGAAGAATAAGCCTCATTCTGATTCAACAGCAGAGATC

AAAGAAAAGACTTCTGTTTTCTGGCCACCAGATATATGTTATCTGTGCTT

AAAGAATTGAAAAACACACATCAAAGGAGAATTTTCTTGGAAAGAGAGGG

TTCAAGCATCACTGTTAGGTGTGGTGGAATCCTTTCCCGAGTCAGTACTG

CTTTCTAGAAGAAAACCGGGGAGATCTATTTGGAATGTATCTAACTCCAA

AGA

**Sanger sequencing of products amplified by divergent primers after overexpression of circCDKN2B-AS1**

B04\_S28214\_S291209a\_C-2\_M13F(-47)

TTGGGAACGGGCCAGTGAATTCGAGCTCGGTACCCGGGGATCCTCTAGAGATTTCAGTAGAGGAAGTGGCAGGAATTTGG

GAATGAGGAGCACAGTGATTAAACTGGGGCCATTCATATGAGAGTTTAAGAACTCAGACCAGTGACTTAGTGTCCCTTTT

GATGAGAAGAATAAGCCTCATTCTGATTCAACAGCAGAGATCAAAGAAAAGACTTCTGTTTTCTGGCCACCAGATATATG

TTATCTGTGCTTAAAGAATTGAAAAACACACATCAAAGGAGAATTTTCTTGGAAAGAGAGGGTTCAAGCATCAAATCGTC

GACCTGCAGGCATGCAAGCTTGGCGTAATCATGGTCATAGCTGTTTCCTGTGTGAAATTGTTATCCGCTCACAATTCCAC

ACAACATACGAGCCGGAAGCATAAAGTGTAAAGCCTGGGGTGCCTAATGAGTGAGCTAACTCACATTAATTGCGTTGCGC

TCACTGCCCGCTTTCCAGTCGGGAAACCTGTCGTGCCAGCTGCATTAATGAATCGGCCAACGCGCGGGGAGAGGCGGTTT

GCGTATTGGGCGCTCTTCCGCTTCCTCGCTCACTGACTCGCTGCGCTCGGTCGTTCGGCTGCGGCGAGCGGTATCAGCTC

ACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAgGAAAGAACATGTGAGCAAAAGGCCAGCAAAAG

GCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAgGCTCCGCCCCCCTGACGAGCATCACAAAAATCGACG

CTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTC

CTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAGCGTGGCGCTTTCTCATAGCTCACGCT

GTAGGTATCTCAGTTCGGTGTAGTCGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCCCGACGCTGCGC

CTTATC