

Table S1

Table S1. Sequences of synthetic DNA oligonucleotides used in this study for constructing siRNA validation system

Name	Synthetic DNA oligonucleotides
siEGFP	5'-AGCTCAAAAAGCAAGCTGACCCGAAAGTTCTTTTAA GTTTTTCGTTTCGACTGGGACTTCAAGAAAAATCTAG-5'
shEGFP	5'-GATCCCCCGAAGCTGACCCGAAAGTTCTtcaagagaGAACCTCAGGGTCAGCTTGCTTTTTGGAAA GGGCGTTTCGACTGGGACTTCAAGaagtctctctCTTGAAAGTCCAGTCGAACAAAAACCTTTTCGA-5'
siLuc	5'-AGCTCAAAAAGACATCACTTACGCTGAGTACTTCGATTTTAA GTTTTTCTGTAGTGAATGCGACTCATGAAGCTAAAAATCTAG-5'
shLuc	5'-GATCCCCGACATCACTTACGCTGAGTACTTCGAttcaagagaTCGAAGTACTCAGCGTAAGTGTGCTTTTTGGAAA GGGCTGTAGTGAATGCGACTCATGAAGCTaagtctctctAGCTTCATGAGTCGCATTCACTACAGAAAAACCTTTTCGA-5'
sisAg1	5'-AGCTCAAAAACCTGCACGACTCCTGCTCAATTTTTAA GTTTTTGGACGTGCTGAGGACGAGTAAAAATCTAG-5'
shsAg1	5'-GATCCCCCTGCACGACTCCTGCTCAttcaagagaTGAGCAGGAGTCGTGCAGGTTTTTGGAAA GGGGACGTGCTGAGGACGAGT aagtctctctACTCGTCCCTCAGCACGTCCAAAAACCTTTTCGA-5'
sisAg3	5'-AGCTCAAAAAGGTATGTTGCCCGTTTGTCTTTTTAA GTTTTTCCATACAACGGGCAACAGAAAAATCTAG-5'
shsAg3	5'-GATCCCCGGTATGTTGCCCGTTTGTCTtcaagagaGACAAACGGGCAACATACCTTTTTGGAAA GGGCATACAACGGGCAACAGaagtctctctCTGTTGCCCGTGTATGAAAAACCTTTTCGA-5'
sip53	5'-AGCTCAAAAAGACTCCAGTGGTAATCTACTTTTTAA GTTTTTCTGAGTCCACCATTAGATGAAAAATCTAG-5'
shp53	5'-GATCCCCGACTCCAGTGGTAATCTACTtcaagagaGTAGATTACCCTGGAGTCTTTTTGGAAA GGGCTGAGGTCACCATTAGATG aagtctctctCATCTAATGGTGACCTCAGAAAAACCTTTTCGA-5'
siMat3	5'-AGCTCAAAAAGAATTGTCCCTACAGAATTTTTTAA GTTTTTCTTAACAGTGGATGCTTAAAAATCTAG-5'
shMat3	5'-GATCCCCGAATTGTCCCTACAGAAttcaagagaATTCTGTAGGTGACAATCTTTTTGGAAA GGGCTTAACAGTGGATGCTTAAaagtctctctTAAGACATCCACTGTTAAGAAAAACCTTTTCGA-5'
siMat6	5'-AGCTCAAAAAGGCATTTCAGAAGTTATATGTTTTTAA GTTTTTCCGTAAGTCTTCAATATACAAAAATCTAG-5'
shMat6	5'-GATCCCCGCATTTCAGAAGTTATATGtcaagagaCATATAACTTCTGAATGCCTTTTTGGAAA GGGCGTAAGTCTTCAATATACAaagtctctctGTATATTGAAGACTTACGAAAAACCTTTTCGA-5'
siLMP1-2	5'-AGCTCAAAAAGACACCACCTGCTCGTGTGTTTTTAA GTTTTTCTGTGTGGACGAGCACTCAAAAAATCTAG-5'
shLMP1-2	5'-GATCCCCGACACCACCTGCTCGTGTGtcaagagaCTCAGGACAGGTGGTGTCTTTTTGGAAA GGGCTGTGTGGACGAGCACTCaagtctctctGAGTGTCTGCCACCACAGAAAAACCTTTTCGA-5'
siLMP1-4	5'-AGCTCAAAAAGTTCAGCTAAGCTACTATGTTTTTAA GTTTTTCAAGTCGATTCGATGATACAAAAATCTAG-5'
shLMP1-4	5'-GATCCCCGTTTCAGCTAAGCTACTATGtcaagagaCATAGTAGCTTAGCTGAACTTTTTGGAAA GGGCAAGTCGATTCGATGATACaagtctctctGTATCATCGAATCGACTTAAAAACCTTTTCGA-5'
siAKT1-1	5'-AGCTCAAAAAGCGACGTGGCTATTGTGAATTTTTAA GTTTTTCTGCTGCACCGATAACACTTAAAAATCTAG-5'
siAKT1-2	5'-AGCTCAAAAACGCTACTTCTCTCAAGATTTTTTAA GTTTTTTCGATGAAGGAGGAGTTCTAAAAATCTAG-5'
siAKT1-3	5'-AGCTCAAAAACCTTCTCTCAAGAATGATTTTTTAA GTTTTTGAAGGAGGAGTTCTTACTAAAAATCTAG-5'
siAKT1-4	5'-AGCTCAAAAAGTGGACCACTGTCTATCGAATTTTTAA GTTTTTCACTGGTGACAGTAGCTTAAAAATCTAG-5'
siAKT1-5	5'-AGCTCAAAAACACCACCTGACCAAGATGATTTTTAA GTTTTTGTGGTGGACTGGTCTACTAAAAATCTAG-5'

To construct this reporter-based siRNA validation system, two complementary sense- and antisense-oligonucleotides were annealed to form a short synthetic DNA fragment with two unique restriction enzyme *Hind*III and *Bgl*II compatible ends, which could be used to insert into the *Hind*III/*Bgl*II-digested targeting reporter and triggering siRNA expression vectors simultaneously.