

## Plasmid Data Sheet

\* **Plasmid Name and Size:** pLKO TRC005-lnc-NDRG1-1:4 1; 7518 bp

\* **developed at the BioMed Resource Core of the 1<sup>st</sup> Core Facility Lab, NTU-CM**

\* **shRNA:**

**lnc-NDRG1-1:4\_1**

target sequence/passenger strand	siRNA sequence/guide strand
ccggAAGGCAGGGCAGGGCAGCGGGCTCGAGCCCGCTGCCCTGCCCTTTCCTTTTGG	
TTCCGTCCCGTCCCGTCGCCCGAGCTCGGGCGACGGGACGGGACGGAAAAAACTtaa	

**ctcgag:** loop sequence of shRNA

\*  TA cloning vector or  Mammalian;  Yeast;  *E. coli*; expression vector

\* **lentiviral transfer vector**

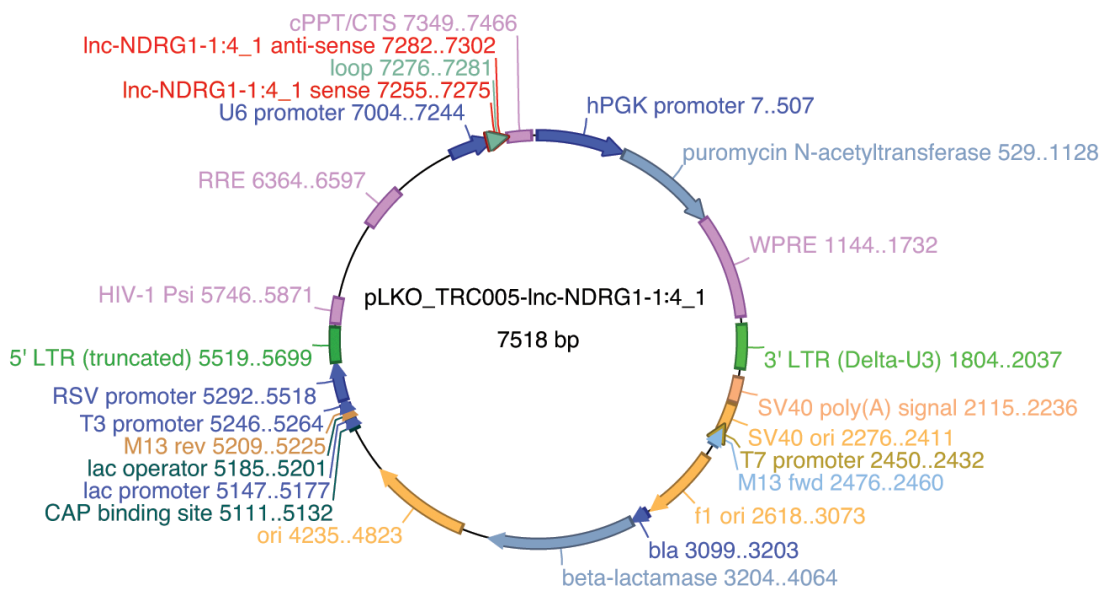
\* **plasmid amplify in *E. coli* is**  high; or  low copy number

\* **expression level is**  low or  high

\* The **human U6 promoter** is used to drive shRNA expression

\* **antibiotic selection:** Amp and Puro

\* Stbl3 (Invitrogen) or stable (NEB) bacterium is recommended to be used for transformation.



DNA Sequence of pLKO\_TRC005-lnc-NDRG1-1:4\_1

cccgggttgcgcctttccaaggcagccctgggtttgcgagggacgcggctgctctggcgtggttccgggaaacgcagcggc  
 gccgacctgggtctcgcacattcttcacgtccgttcgcagcgtcaccggatcttcgccgctacccttggggcccccgggcag  
 gttcctgctccgcccctaagtccggaagggtccttcggttcgcggcgtgccggacgtgacaaacggaagccgcacgtctact  
 agtaccctcgcagacggacagcgcagggagcaatggcagcgcgccaccgcgatgggctgtggccaatagcggctgctcag  
 cagggcgcgccgagagcagcggccgggaagggcggtgcgggagggcggggtgtggggcggtagtggggccctgttctg  
 cccgcgcggtgttccgattctgcaagcctccggagcgcacgtcggcagtcggctccctcgttgaccgaatcaccgacctctcc  
 ccaggggggatccaccggagcttaccatgaccgagtaacaagcccacgggtgcgcctcgcaccgcgacgacgtccccagggcc  
 gtacgcacctcgcgccgcttcgccgactacccgccacgcgccacaccgtcgatccggaccgccacatcgagcgggtcac  
 cgagctgcaagaactcttcacgcgcgtcgggctcgacatcgcaaggtgtgggtcgcggacgacggcgcgccgctggcg  
 gtctggaccacgccggagagcgtcgaagcggggcggtgttcgccgagatcgcccgcgatggccgagttgagcgggtccc  
 ggctggccgcgcagcaacagatggaaggcctcctggcgcgccaccggccaaggagccgcgtggtcctggccaccgtcgg  
 cgtctcgcggaccaccagggcaaggtctgggcagcgcctcgtctccccggagtgaggcggccgagcgcgccggggt  
 gcccgccttctggagacctccgcgccccgcaacctcccccttctacgagcggctcggcttaccgtcaccgccagctcgaggt  
 gcccgaaggaccgcgcacctggtgcatgccgcaagcccgggtgcctgaacgcgtaagtcgacaatcaacctctggattacaa  
 aattgtgaaagattgactggtattcttaactatgttgccttttacgctatgtggatacgtctttaatgccttgtatcatgctattgctt  
 cccgtatggcttctatttctcctctgtataaatctgggtgctgtcttcttatgaggagtgtggcccgtgtcaggcaacgtggcgtg  
 gtgtgactgtgttctgacgcaacccccactggttggggcattgccaccacctgcagctccttccgggacttctcgttccccct  
 cctattgccacggcgaactcctcgcgcctgcccgtgctggacaggggctcggctgttgggactgacaattccgtg  
 gtgtgtcggggaaatcctccttctggctgctcgcctgtgttgcacctggattctgcgcggacgtccttctgctacgtcct  
 tcggccctcaatccagcggaccttcttcccgcgcctgctgcggctcctcgcgcttctcgccttcgcctcagacg  
 agtcggatcctcttggggcgcctccccgcctcactttaaagaccaatgacttacaaggcagctgtagatcttagccacttttaaaa  
 gaaaaggggggactggaagggctaattcactcccaacgaagacaagatctgcttttctgactgggtctctctggttagaccag  
 atctgagcctgggagctctctggctaactaggaaccactgcttaagcctcaataaagcttgccttgagtgttcaagtagtgtgtg  
 cccgtctgtgtgactctgtaactagagatccctcagacccttttagtcagtggtgaaaatctctagcagtagtatagttcat  
 gtcatcttattcagtttataacttgcaagaaatgaatatcagagagtgagaggaactgtttattgacgttataatggttacaaa  
 taaagcaatagcatcacaatttcacaataaagcatttttctactgcattctagttgtggtttgccaactcatcaatgtatcttcat  
 gtctggctctagctatcccggccctaactccgcccataccgcccctaactccgcccagttccgcccattctccgcccattggtgac  
 taattttttattatgacagggccgaggccgctcggcctctgagctattccagaagtagtgaggaggctttttggaggcctaggg  
 acgtacceaatcgcctatagtgagctgattacgcgcctcactggccgctgtttacaacgtcgtgactgggaaaaccctggcg  
 ttaccaactaatcgccttgagcacatcccccttccgagctggcgtaatagcgaagaggcccgaccgatcgccctcccaa  
 cagttcgcagcctgaatggcgaatgggacgcgcctgtagcggcgcaatagcgcggcggtgtggtggttacgcgcagcgt  
 gaccgtacacttgcagcgcctagcgcgcctcttctccttcttctccttctcctccttctcgcacgctcgcggcttccccgtaag  
 ctctaaatcggggctccttttagggttccgatttagtctttacggcacctcgacccccaaaaacttgattagggtaggtcacgt  
 agtgggcatcgcctgatagacggttttcgcccttgacgttggagtccacgttcttaatagtgactctgttccaaactggaaca  
 aactcaacctatctcggctattctttgattataagggatttggcatttcggcctattggttaaaaaatgagctgatttaacaaaa  
 atttaacgcgaatttaacaaaatattaacgcttacaatttagtgggcacttttcggggaaatgtgcgcggaaccctatttgttattttc  
 taaatacattcaaatatgtatccgctcatgagacaataaccctgataaatgctcaataatattgaaaaggaagagtagtattcaa  
 cattccgtgcgccttattccctttttgcccattttgccttctgttttgtcaccagaaacgctggtgaaagttaaagatgctga  
 agatcagttgggtgcagagtggtttacatcgaactggatctcaacagcgtaagatccttgagagtttcccccgaagaagcttt  
 tccaatgatgagcacttttaagttctgctatgtggcgcggtattatcccgtattgacggcggaagagcaactcggctcgcgcata  
 cactatttcagaatgacttgggtgagtactaccagtcacagaaaacatcttacggatggcatgacagtaagagaattatgcagtg  
 ctgccataacctgagtgataaactgcggccaacttcttgacaacgatcggaggaccgaaggagctaaccgctttttgcaca  
 acatgggggatcatgtaactcgcctgatcgttgggaaccggagctgaatgaagccataccaaaacgagcgtgacaccacgat  
 gccttagcaatggcaacaacgttgcgcaactattaactggcgaactacttacttagcttccggcaacaattaatagactggatg  
 gaggcggataaagttgcaggaccacttctgcctcggccttccggctggctggttattgctgataaatctggagccgggtgagcgt  
 gggctcgcggatcattgcagcactggggccagatgtaagcctcccgtatcgtattctacacgacggggagtcaggcaa  
 ctatggatgaacgaaatagacagatcgtgagataggtgcctcactgattaagcattgtaactgtcagaccaagtttactcatata  
 cttagattgatttaaaactcatttttaattaaaaggatctaggtgaagatccttttgataatctcatgacaaaaatccctaacgtgag

tttcttccactgagcgtcagaccccgtagaaaagatcaaaggatcttctttagatccttttttctgcgcgtaactctgctgcttcaaac  
aaaaaacaccgctaccagcgggtggttggccggaatcaagagctaccaactctttccgaaggtaactggcttcagcagagc  
gcagatacacaactgttcttctagttagccgtagttagccaccacttcaagaactctgtagcaccgctacatacctcgtctgc  
taatcctgtaccagtggtgctgcccagtgggcgataagtcgtgtcttaccgggtggactcaagacgatagttaccggataaggcgc  
agcggctgggctgaacggggggttctgtcacacagcccagcttggagcgaacgacctacaccgaactgagatacctacagcgt  
gagctatgagaaagcgcacgctcccgaaggagaaagggcggacaggtatccggttaagcggcagggtcggaacaggagag  
cgcacgaggagctccaggggaaacgcctggtatctttatagctctgctgggtttccaccctctgacttgagcgtcgttttgt  
gatgctcgtcagggggcggagcctatgaaaaacgccagcaacgcggccttttacggttctggccttttctggccttttctc  
acatgttcttctgcgttaccctgattctgtgataaccgtattaccgctttgagttagctgataccgctcggcagccgaacg  
accgagcgcagcagtcagttagcggaggaagcggaaagagcggcaatacgaaccgctctcccgcgcttggccgattc  
attaatgcagctggcagcagcaggttcccagctggaaagcgggagctgagcgcgaacgcaattaatgtgagttagctactcattag  
gcacccaggctttacattatgcttccggctcgtatgttgtgtggaattgtgagcggataacaattcacacaggaaacagctatga  
ccatgattacccaagcgcgaattaaccctactaaagggaaacaaagctggagctgcaagcttaagttagtcttatgaatactc  
ttgtagtcttgaacatggaacgatgagttagcaacatgcttacaaggagagaaaaagcaccgtgcatgccgattgtggaagt  
aaggtgtacgatcgtgcttattaggaaggcaacagacgggtctgacatggattggacgaaccactgaattgccgattgcaga  
gatattgtatthaagtgcctagctcgatacataaacgggtctctctggtagaccagatctgagcctgggagctctctggctaactagg  
gaaccactgcttaagcctcaataaagcttgccttgagtcttcaagtagtgtgcccgtctgttgtgactctgtaactagagat  
ccctcagacccttttagtcagtggtgaaaatctctagcagtgggcggcgaacagggactgaaagcgaaagggaaaccagagga  
gctctctcgacgcaggactcggcttgaagcgcgcacggcaagagggcagggggcggcactggtgagtagccaaaaattt  
tgactagcggaggctagaaggagagagatgggtgagagcgtcagttataagcgggggagaattagatcgcgatgggaaaaa  
attcggttaagccaggggggaaagaaaaatataaataaaacatatagtatgggcaagcaggagctagaacgattcgcagtta  
atcctggcctgtagaaacatcagaaggctgtagacaataactgggacagctacaaccatccctcagacaggatcagaagaactt  
agatcattatataatacagtagcaaccctctattgtgtcatcaaaaggatagagataaaaagacaccaaggaagctttagacaagata  
gaggaaagagcaaaacaaaagtaagaccaccgcacagcaagcggccgctgatcttcagacctggaggaggagatagagggac  
aattggagaagtgaattatataaataaaagtagtaaaaattgaaccattaggagtagcaccaccaaggcaagagaagagtgtg  
gcagagagaaaaagagcagtggggaataggagctttgtccttgggttcttgggagcagcaggaagcactatgggcgcagcgtc  
aatgacgctgacggtagcaggccagacaattattgtctggtatagtcagcagcagaacaatttctgagggctattgagcgcac  
agcatctgttcaactcacagctcggggcatcaagcagctccaggcaagaatcctggctgtggaagatacctaaaggatcaaca  
gctcctggggatttggggttctctgaaaactcattgcaccactgctgtccttgaatgctagttaggagtaataaatctctggaac  
agatttgaatcacacgacctggatggagtgggacagagaattaacaattacacaagcttaatacactccttaattgaagaatcgc  
aaaaccagcaagaaaagaatgaacaagaattattggaattagataaatgggcaagtttgggaattggttaacatacaaaattggt  
gtggtatataaaattatcataatgatagtaggaggttggtaggttaagaatagttttgctgtacttctatagtaatagagttaggc  
agggatattcaccattatcgttcagaccacctcccaccccgaggggacccagagagggcctatttccatgattcctcatattt  
gcatacagatacaaggctgtagagagataattagaattaattgactgtaaacacaaagatattagtaaaaatacgtgacgtaga  
aagtaataatttctgggtagttgagttttaaattatgttttaaaatggactatcatatgcttaccgtaactgaaagtatttcgatttctt  
ggctttatatacttgtgaaaggacaggtaccggAAGGCAGGGCAGGGCAGCGGGCTCGAGCCC  
GCTGCCCTGCCCTGCCCTTTTTTGAattctagatcttgagacaaatggcagttatccacaattttaaagaa  
aaggggggattgggggtacagtgcaggggaaagaatagtagacataatagcaacagacatacaaaactaaagaattacaaaa  
caaattacaaaaattcaaaatttccgggttattacagggacagcagagatccacttggcggcggctcgaggggg