

**Figure S3.** The nucleotide sequence and the deduced amino acid sequence of *NnPALI*.

gaaaaccagttcaatccctcaatttccgggtccccgcctctctctctctctgtctcgaacctcttgcaacgcgtcacc

ATGGTTGCAGGGCCGAGATAGTGCAGAATGGCTCGACTCGCAGATCAAAGTCCTTCCATGCAGCATGTGCGAG  
M V A G A E I V Q N G S H S Q I K V L P C S M C E  
GAGGATCCTTTGAACTGGGCCAAGGTGGCCAAGGAGCTCCAAGTTCGACTATGAAGAAGTGAAGTCATGATC  
E D P L N W A K V A K E L Q G S H Y E E V K C M I  
GATCGATTCACTCGAACCAACTCAGTCAACTTGAAGGTGAGAACCTCCAAGTCGACAGCGTCGTCGCGTCGCT  
D R F S R T N S V N L Q G Q N L Q V A D V V A V A  
CGTCGCAAGCCGACGTCGAAGTCCGACTCGACGCCGACTGCCAAGTTCGGGTGCAAGAGAGCGCTGCCTGG  
R R Q A D V E V R L D A D T A K F R V Q E S A A W  
GTCTCGGCTCAGTCTGCAAAGTACCGACACTTATGGCGTCACAACCGGTTTCGGCGCCACCTCGCACCGCCGG  
V S A Q S C K G T D T **Y** G V T T G F G A T S H R R  
ACGAACCAAGGGGTGATCTTCAGCGGAGCTTATCAGATTCTTAAACGCCGGCGTCATTGCCGAGACGAAAT  
T N Q G V D L Q R E L I R F **L** N A G V I A G D G N  
GAGTCCCCGGCGATGTTGCCGAGCAGCCATGCTGTACGTACCAACTCTTCTTCAAGGCTACTCGGGCATC  
E L P G D V A R A A M L V R T N T L L Q G Y S G I  
AGATGGGACATACTTAGTACCGTCAAGGACCTCTCAACGCTGGCCTGACACCGTACTCCCCCTCCGCGGCACA  
R W D I L S T V K D L L N A G L T P L L P L R **G T**  
ATCACAGCCTCCGGCGACCTCGTCCCGTGTCTACATTGCAGGAGTAATCACCGGGCGTCCCACTCCAAGTTC  
**I T A S G D L V P L S Y I A** G V I T G R P N S K V  
CGTACATGCACAGGCGAGCTGATCTCCGGAGCGGAAGCTCTCCGGCGGTGGGAGTGAAAAAGCCATTGAGTTA  
R T C T G E L I S G A E A L R R V G V E K P F E L  
CAACCAAAGGAGGGGTAGCCATAGTCAACGGAACCCGAGTGGGAGCAGCGCTGGGGGCTATCGTGTGTTACGAC  
Q P K E G L A I V **N** G T A V G A A L G A I V C Y D  
GCTAACGTCCTGGCGTGGCGTCTGAGATCGCATCGCGATGTTCTGCGAAGTATGCTGGGGAAGCCGAGTTC  
A N V L A V A S E I A S A M F C E V M L G K P E F  
ACGGATCCGTTGACTACCGGCTGAAGCACCATCCGGTTCAGATGGAGGCGCGCAATGATGGAGTACGTTCTC  
T D P L T H R L K H H P G Q M E A A A M M E Y V L  
GCCGGAAGCGGCTTAGTTAAGAATGCGGCAAAGCTTACGAATAACAATCCCTTGCAGAAGCCGAAACAAGACCGA  
A G S G L V K N A A K L H E Y N P L Q K P K **Q** D R  
TATGCTCTTCGTACTTCTCCCCAGTGGCTGGGCCACAGATCGAGGTGATTAGAGTGGCCACCCACATGATCAA  
**Y** A L **R** T S P Q W L G P Q I E V I R V A T H M I Q  
CGTGAAATAAACTCAGTGAATGACAACCCGTTATTGATGTGGCCGAGACAAAGCCCTCCACGGTGGCACTTC  
R E I N S V N D N P V I D V A R D K A L H G G N **F**  
CAGGGGACCCAGTCCGTGTAGCGATGGACAATCTACGTCTAGCCGTGGCGGATCGGAAAGCTGATGTTCCGG  
Q G T P V G V A M D N L R L A V A A I G K L M F A  
CAATTCTGAGCTAGTGAACGACTACTACAACGAGGCCTGCCTTCCAACCTCAGCGGGACCCGACCCAGC  
Q F S E L V N D Y Y N G G L P S N L S G G P D P S  
CTGGACTACGATTCAAGGTGCTGAGATTGCCATGGCATCATAACGTCAGAGCTTCAATTTGGCAAACCCA  
L D Y G F K G A E I A M A S Y T S E L Q Y L A N P  
GTCACAACCCATGTACAGAGTCCGAGCAACACAACAGGATGTTAACTCTCTCGGCTTGGTATCCGCCCGGAAG  
V T T H V Q S A E Q H N **Q** D V N S L G L V S A R K

TCGGCGGAGGCTATCCACATCCTCAAGTTGATGACTGCAACCTACCTGGCCGCGCTCTGCCAAGCCATTGATCTC  
S A E A I H I L K L M T A T Y L A A L C Q A I D L  
CGCCATCTTGAGGAGAATCTCCGCCAGACCGTCAAATCCGTTGTTGCACAGGTAGCAAAGAAGACCCTAAGCACA  
R H L E E N L R Q T V K S V V A Q V A K K T L S T  
GGACCCAACGGTGAGCCGCTCCCTGGCCGATTTGTTGAGAAAAGACCTGCTCCAAGTAGTGGAGAGCGAACCAGTA  
G P N G E P L P G R F V E K D L L Q V V E S E P V  
TTGCCTATGTGGACGACCCTTGCCGTGTCGACTACCCTCTCATGCAGAAGCTCCGGCATGTCCTCGTTGAACAC  
F A Y V D D P C R V D Y P L M Q K L R H V L V E H  
TCACTACAGAGCTCGCATAACAGAGGCGGAGCTGTCGCCAAATCTGGTGTCTTCGGACGGATAAAGATGTTTCGAA  
S L Q S S H T E A E L S P K S G V F G R I K M F E  
TCCGAGCTCAAAGCGCAGCTCAATGCCCAAGTTAAAATTGCGCGTGCCAAATATGATAACGGAACCCACAGGTT  
S E L K A Q L N A Q V K I A R A K Y D N G T P Q V  
CCCAACAGGATCGCCGATTGCCGGTCGTATCCGGTCTACAAGTTTGTCCGTACAGAGCTTGGTACTCAGCTGCTT  
P N R I A D C R S Y P V Y K F V R T E L G T Q L L  
AGTGGCACCAGAAAAGTGTCTCCTGGGGAACAAATCGAGGCCGTCCATGCGGCTATCTGCGATGGCAAACCTGGTT  
S G T R K V S P G E Q I E A V H A A I C D G K L V  
GCTCCATTGATGGAGTGCTTGAATGGATGGCCCCAGAGGCCCTGGCCATTTTAAAtttgctttacttttggtgtt  
A P L M E C L N G W P Q R P G P F \*  
gccttcttggttttactttttctttctcctcctctacggtttgtaggaagaggcgattccaataaattataga  
tgttgcaaaaaaaaaaa