

TTTGTTCCTCAGTGAATCTGAGAAGCATTAGCGT		5'UTR
CTACAATTCCTCAGCAATTATTGCGAGGGGATTTGTTTCTCGGTGATCTGAGAAGCAGCAGCA		
ATGGAGATGACTCTGCAGCTCCACGTGCCCTTGGCCGGGAGGACCGGCGCTGCCTCGGG		60
M E M T L Q L H A A L G R R T G P S L G		20
ATCTTCTCGCAACCTCCACTACAGTACAAACAAATCACACGAATCAGGATCATGCCTCAA		120
I F S Q P P L Q Y K Q I T R I R I M P Q		40
ATGAATGCAGCAAGTTCAGGTTCAGATTATCCGAGGAGGCGCACGAGGAAGAGCTCAATT		180
M N A A S G S D Y P R R R T R K S S I		60
CCGATGACTAAAGTTGTGGCCATAAAGGCTTGCACCAAGGCCACGGTAAGGTCGGAC		240
P M T K V A G P K G F A P R P Q V R S D		80
ACCCAAAAGAAAGATCTAGTCTGATTCGGAAGGAAAAGAGTGTCTGAAACGCTGTGCTCCT		300
T Q K K D L A D S E G K E V S E T S A P		100
AGTGATTACACTCTTCCGAGCCCCGAAATCAGTGTAACGAAAGGTATTGGTCAAGAACAA		360
S D Y T L P S P E I S V T K G I G Q E Q		120
ATAACTGGCCTGGGATACAGTCTGGCGTCTACTAGAGATGTGAGATGAAATTAAGGAC		420
I T G L G S Q S G V S L E M S D E I K D		140
CAACGACATGGCACCAGGACCCGATGAAAAAGCTTTGCTAGGAATGTTTCCACTGCT		480
R H G T E D T D E K A L L G M F S T A		160
CTTGATGATAATGAAACAGATAGGCAGGGAGCCAAAACCTGATGGCGATGGTATTAGTTTA		540
L D D N E T D R Q G A K T D G D G I S L		180
ATAAAGCAGTATCAGGAAGTAGTTTATAACAGTGGGAAATCGAGGATGAAAGGGAAGTA		600
I K Q Y Q E V V Y N S G E I E D E R E V		200
GTTTATAACAGTGGGGAAATCGAGGATGAAAAAGAAGTAGTTTATAACAGTGGGGAAAT		660
V Y N N S G E I E D E K E V V Y N S G E I		220
TGAGGATGGAAGGTGGCTGACATTGACGAAGGCCAAAAGATGTAGGAAATCTGACAGAG		720
E D G K V A A D I D E G P K D V G N L T T E		240
GTAGATGATCGTGACAAATACCTTGCCGATGAAGAACCTTGGCAGTGACAAGTACCTTGTG		780
V D D R D K Y L A D E E L G S D K Y L V		260
GATGAAGAACCTGACATGGAGTCAAAGTCCAAACAGAAGGCAGATGCTGATGCACTGGAA		840
D A E E P D M E S S K S K Q K A D A D A L E		280
CAGAAGCAGAGACTAGAGTCTGTTGTTGAGGAGAACCTTTCAAGAGGGACCAAAGTAATT		900
Q K Q R L E L V V E E N F S R G T K V I		300
ATTTTCCAGAAGAGGTGAAATCTGAACAATCAATTGAAGTGCTTCTTAAACAGAAGTTTA		960
I F P E E V V K S E Q S I E V L L N R S L		320
ACAGTTCCTTATGAGTGAGAATGATGTTTTCGTAAAGGGATCATTCAATGGTTGGAGGTGG		1020
T V L M S E N D V F V K G S F N G W R W		340
AAATCTTTTACCGAAAGGATGCACAAAACGACCTTAAAGGGGATTGGTGGCTCTGTCGG		1080
K S F T E R M H K T D L K G D W W S C R		360
CTTTATGTTCCGAAGGAGGCCTACAGATGGATTTTGATTCTTCAACGGCGGAACATATC		1140
L Y V P K E A Y R M D F V F F N G G T I		380
TATGAGAATAACAATTACAATGATTTTTCTTTATCAGTTCACGGTGGATTGGATGAATCA		1200
Y E N N N Y N D F S L S V H G G L D E S		400
TCATTTGAGGACTTCTTACTTGAAGAGAAGCAGAAAGACTCCAGAGACTTGCTGCTGAA		1260
S F E D F L L E E K Q K E L Q R L A A E		420
CAAGCTGAGAGAGAAGCAGGCTGAAGAGCAGCGCAGGCGAGAGGCAGAGAAGGCTGCA		1320
Q A E R E R Q A E E Q R R R E A E K A A		440
AGCGAAGCTGACCGATCACAAAGCAAGGGCAGAGGTAGATAAAAAAGAGGGGCGCTTTTCAA		1380
S E A D R S Q A R A E V D K K R G A F Q		460
CAAGTGCTAACCTTGGCTCAGTCTACTGGTACTGTATGGTACATGCAACCTAGTGAATTC		1440
Q V L T L A Q S T G T V W Y I E P S E F		480
AAAGGTGGGGACAGGGTCAGATTATATTATGACAGAAGCTCTCGGCCCTTGAACACGGG		1500
K G G D R V R L Y Y D R L S R P L E H A		500
GCAAAAGTCTGGATTACCGGAGGCCATAATACTGGACTAATGGATTAACTATTGTGCGAA		1560
A K V W I H G G H N N W T N G L T I V E		520
AGTCTTATCCATCAAAAAAGAAAGATGGTGATTGGTGGTATCGGGACGTTACTACTACCT		1620
S L I P S K K K D G D W W Y A D V T I P		540
GAACGAGCTCTGTTCTCAATTGGGTTTTTACTGACGGACCCCCGAGGAGGCAAAAGGTG		1680
E R A A L V L N W V F T D G P P Q E A K V		560
TATGATAACAATTACTCTTTAGACTTCCATGCTATTGTACCAAGGCTGTGTCTGAAGAA		1740
Y D N N N Y S L D F H A I V P R S V S E E		580
CAGTTCTGGGTTGAAGAAGAACAATAGATAACGACACTTCAGGAGGAAAGAAAAATTA		1800
Q F W V E E E H R I Y T T L Q G E E R K L		600
AAAGAGAAGGCTTTGCGTGAAAAGGTTGAAAAAATTGCAAGCTTGAAGACTGAAATGAAG		1860
K E K A A L R E E K V E K I A S L K A E M K		620
GAAAGAACAATGAAGACATTTTGTACCTCTCAGAAGCATATAGTTTATACTAGGCCACTA		1920
E R T M K T F L T S Q K H I V Y T E P L		640
GTTGTACGGGCTGGTGCTTAGTTACAATTTTCTATAATCCTTCCCACTGTTTAAAC		1980
V V R A A G C L V T I F Y N P S H T V L N		660
GGCAAGCCTGAAATATGGTTAAGATATTCATTTAATCGTTGGACTACCCGTAGTGGCCCG		2040
G K P P E I W L R Y S F N R W T H R S G P		680
TTATTGCCTCAGAAAATGGTGGCTTCAGAAAACAGAACACATCTCGAAGCAACTGTAAAG		2100
L L P Q K M V R S E N R T H L E A T V K		700
GTCCACTCAATGCCTACATAATGGACTTTGTTTCTCTGATACGGAATATGGTGGGAATT		2160
V P L N A Y A I M D F V F S D T E Y G G I		720
TATGACAATAAAAAATGGGAGGGACTACCACATTCCTGTTTCTGGAGGAATCTGTAAAGAG		2220
Y D N K N G R D Y H I P V S G G I C K E		740
CCTCCAATGCACATGTACATATTTCTGTTGAAATGGCACCTATTGCCAAGGTGGGAGGC		2280
P P M H I V H I S V E M A P I A K V G G		760
CTTGGGATGTTGTAAACAAGTCTTTCTCGTGCTGTTCAAGATTTAGGTGCATAGCGTTGAT		2340
L G D V V T T S L S R A V Q D L G H S V D		780
ATTATTCTTCCGAAGTATGATTGCATGAATCTTAGCAATGTGAAAGACTTTTCATTTCCAC		2400
I I L P T K Y D C M N L S N V K D F H F H		800
CAATCCTTTTCTGGAAGGAGACAGAAATAAAAGTCTGGTTTGGAAAGGTTGAAGGCCTT		2460
Q S F F W K E T E I K V W F G K V E G L		820
TCACATTTTCTTAGAGCCTCAGAATGGTATGTTTTCGATTGGATGCATATATGGAAGG		2520
S T F F L E P Q N G M F S I G C I Y G R		840
AATGATGCTGACAGATTGCGGTTTCTTTTGTACGCGGCTCTTCAGTTTCTCCTCCAAAGT		2580

N D A D R F G F F C H A A L Q F L L Q S	860
GGGTACATCCGGATATTATTCATTTGCCATGATTGGTCCAGTGCCTCCGGTTGCATGGTTA	2640
G S H P D I L H C H D W S S A P V A W L	880
TTTAAGGAACACTATATACAGTATGGTCTGAAGAGTGCCTCGACTAGTCTTCACCATTCAT	2700
F K E H Y I Q Y G L K S A R L V F T I H	900
AACCTTGAGTTTCGGGATTTCAGAACATCAGCAAAAGCAATGGCTTACGTGACAAGGCTACA	2760
N L E F G I Q N I S K A M A Y A D K A T	920
ACTGTATCACCCACATACTCTAAGGAGGTTTCAGGAAGTCTCTGCCGTATCTCCCCATCTT	2820
T V S P T Y S K E V S G S P A V S P H L	940
TACAAATTTTCATGGCATTATAAATGGGATTGATCCAAATATCTGGGATCCATACAATGAC	2880
Y K F F H G I I N G I D P N I W D P	960
AACCTTCATTCTGTAGCTTACACCTCAGAAAATGTTGTGGAAGGCAAGAAGGCTGCTAAA	2940
Y N D N F I P V A Y T S E N V V E G K K A A K	980
GAAGCCTTGCAGCAACGACTGGGTTTGAGAAGTTCTGATCAACCTTACTTGGAAATAATC	3000
E A L Q Q G R L G L R S S D Q P L L G I I	1000
ACTCGTTTAACAGTTCAAAAGGGAATTGATCTCATTAAACACGCCATCTGGAAAAACACTT	3060
T R L T V Q K G I D L I K H A I W K T L	1020
GAGCGAAATGGACAGGTTGTTTTGCTCGGTTCAGCCCCAGATCCCCGCATACAAAATGAT	3120
E R N G Q V V L L G S A P D P R I Q N D	1040
TTTGTTAATTTGGCGAAACAGTTGCATTCTTCTCATGGTGACCGTGTGCGCCTTTGTTTG	3180
F V N L A K Q L H S S H G D R V R L C L	1060
ACTTACGATGAGCCTCTTTCACACTTGATATATGCAGGTTTCAGACTTCATTCTCGTTCCT	3240
T Y D E P L S H L I Y A G S D F I L V P	1080
TCAATTTTGAACCATGTGGCCTGACCCAACCTATAGCTATGCGATATGGGTCTATCCCT	3300
S I F E P C G L T Q L I A M R Y G S I P	1100
GTTGTTTCGTA AAACTGGAGGGCTTTACGACACTGTCTTTGATGTTGATAATGATAAAGAG	3360
V V R K T G G L Y D T V F D N D K E	1120
AGAGCTCAAGCACAGGGTCTTGAACCAAATGGCTTTAGCTTTGACGGAGCTGATTCCGGGT	3420
R A Q A Q G L E P N G F S F D G A D S G	1140
GGTGTGGAATATGCGCTTAATAGAGCAATCTCGACATGGTATGATAATCGGCAATTGTTT	3480
G V E Y A L N R A I S T W Y D N R Q L F	1160
AAGTCATTATGCAAATGCGTTATGGAGCAAGACTGGTCTTGGAAACCGCCCTGCTTTGGAC	3540
K S L C K C V M E Q D W S W N R P A L D	1180
TATATGGAGCTCTACCATG CAGCAAGGAAGATATGA	3 5 7 6
Y M E L L Y H A A R K I *	1191
AGATTAAATTGCAATAAGAAAGTGCTCTGTTATCATCTCCACCAATTTTCTGTCCAGCT	
TTAGCCATTTCTCTTTAGTTTTATTACAGCCATTTTCTCTAAGTTGTTTAGTTGAAAGC	
ATGAGTAGCTTTCTTTGCTTGTTATTGGGATGGAATGAATGAGTTAAAAATCACACTCACA	
TTTTCAGTTATAATAATCAACACAATTTCATTCGTTTTAAAAAAAAAAAAAAAAAAAAAAAA	
AAAAAA	

3'UTR