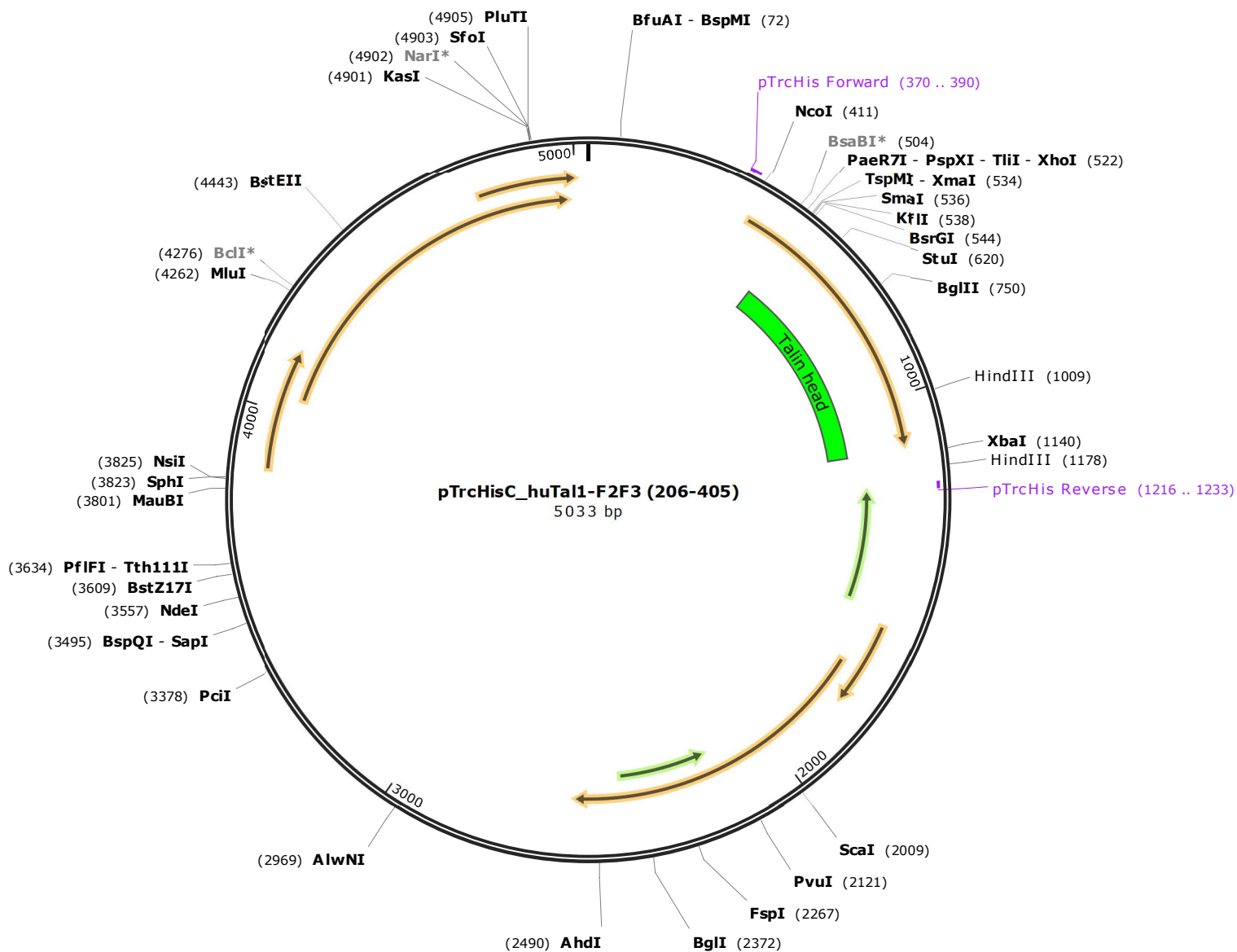


pTrcHisC\_huTal1-1-406-2stop -



5' GTTTGACAGCTTATCATCGACTGCACGGTGCACCAATGCTTCTGGCGTCAGGCAGCCATCGGAAGCTGTGGTATGGCTGTGCAGGTCGTAATCACTGCATAATTCGTGT  
 3' CAAACTGTCGAATAGTAGCTGACGTGCCACGTGGTTACGAAGACCGCAGTCCGTCGGTAGCCTTCGACACCATACCGACAGTCCAGCATTTAGTGACGTATTAAGCACAC  
 CGCTCAAAGGCGCACTCCCGTTCTGGATAATGTTTTTTCGCCGACATCATAACGGTTCGGCAAATATTCTGAAATGAGCTGTTGACAAATTAATCATCCGGCTCGTATAA  
 GCGAGTTCGCGGTGAGGGCAAGACCTATTACAAAAACGCGGCTGTAGTATTGCCAAGACCGTTTATAAGACTTACTCGACAAGTGTAAATAGTAGCCGAGCATATT  
 TGTGTGGAATTGTGAGCGGATAACAATTTACACAGGAAACAGCGCCGCTGAGAAAAAGCGAAGCGGCACTGCTCTTTAACAAATTTATCAGACAATCTGTGTGGGCACTC  
 ACACACCTTAACACTCGCCTATTGTTAAAGTGTGTCTTTGTGCGGGGACTCTTTTCGCTTCGCGTGACGAGAAATTTGTTAAATAGTCTGTTAGACACACCCGTGAG

**BfuAI**  
**BspMI**

pTrcHis Forward  
GAGGTATATATTAATGTATCG

**NcoI**

GACCGAATTATCGATTAACTTTATTATTAATAAATAAGAGGTATATATTAATGTATCGATTAATAAGGAGGAATAAACCATGGGGGTTCTCATCATCATCATCATC  
 CTGGCCTTAATAGCTAATTGAAATAATAATTTTAAATTTCTCCATATATAATTACATAGCTAATTTATCTCTTATTGGTACCCCAAGAGTAGTAGTAGTAGTAG  
 M G G S H H H H H

**TliI**  
**XhoI**  
**PspXI**  
**PaeR7I**  
**BsaBI\***  
**XmaI**  
**TspMI**  
**SmaI**  
**KfII**  
**BsrGI**

ATGGTATGGCTAGCATGACTGGTGGACAGCAAATGGGTGGGATCTGTACGACGATGACGATAAAGGATCGATGGATCCGACCTCGAGCCATGTCCCGGGACCTGTACAG  
 TACCATACCGATCGTACTGACCACCTGTCTTTACCCAGCCCTAGACATGCTGCTACTGCTATTCCCTAGCTACCTAGGCTGGAGCTCGGTACAGGGCCCTGGGACATGTC  
 Talin head  
 H G M A S M T G G Q Q M G R D L Y D D D K D R W I R P R A M S R D P V Q

**StuI**

CTGAACCTCTGTATGTGAGGCACGAGATGACATCCTGAATGGCTCCCATCCTGTCTCTTTGACAAGGCCTGTGAGTTTGGCTGGCTTCCAATGCCAGATCCAGTTTGG  
 GACTTGGAGGACATACAGTCCGTGCTCTACTGTAGGACTTACCGAGGGTAGGACAGAGGAACTGTTCCGGCACTCAAACGACCGAAGGTTACGGTCTAGGTCAAACC  
 Talin head  
 L N L L Y V Q A R D D I L N G S H P V S F D K A C E F A G F Q C Q I Q F G

**BglII**

GCCCCAATGAGCAGAAGCACAAGGCTGGCTTCCTTGACCTGAAGGACTTCTGCCAAGGAGTATGTGAAGCAGAAGGGAGAGCGTAAGATCTCCAGGCACACAAGA  
 CGGGGTGTTACTCGTCTTCGTGTTCCGACCGAAGGAACTGGACTTCTGAAGGACGGGTTCCTCATACACTTCGTCTTCCCTCTCGCATTCTAGAAGGTCCTGTGTTCT  
 Talin head  
 P H N E Q K H K A G F L D L K D F L P K E Y V K Q K G E R K I F Q A H K

ATTGTGGGAGATGAGTGAGATTGAGGCCAAGGTCCTGCTACGTGAAGCTAGCCGTTCTCTCAAGACTTACGGTGTCTCTTCTTCTGTTGAGGAAAAATGAAAGGG  
 TAACACCCGCTACTCACTCTAACTCCGGTTCAGGGCATGCACTTCGATCGGGCAAGAGAGTTCTGAATGCCACAGAGGAAGAAGGACCTTCTTTTTTACTTTCCC  
 Talin head  
 N C G Q M S E I E A K V R Y V K L A R S L K T Y G V S F F L V K E K M K G

AAGAACAAGCTAGTGCCAGGCTTCTGGGCATCAACAAGGAGTGTGTGATGCGAGTGGATGAGAAGACCAAGGAAGTGATCCAGGAGTGGAACCTCAACAACATCAAACG  
 TTCTTGTTCGATCAGGGTCCGAAGACCCGATGTGGTTCCTCACACTACGCTCACCTACTCTTCTGTTTCTTCACTAGGTCCTCACCTTGGAGTGGTGTAGTTTGC  
 Talin head  
 K N K L V P R L L G I T K E C V M R V D E K T K E V I Q E W N L T N I K R

HindIII

CTGGGCTGCGTCTCCCAAAAGCTTACCCTGGATTTTGGAGATTACCAAGATGGCTATTACTCAGTACAGACAACCTGAAGGGGAGCAGATcGCACAGCTCATTGCTGGCT  
 GACCCGACGCAGAGGGTTTTTCGAAGTGGGACCTAAAACCTCTAATGGTTCTACCGATAATGAGTCATGTCTGTTGACTTCCCTCGTCTAgCGTGTGAGTAACGaCCGA

1100

Talin head

W A A S P K S F T L D F G D Y Q D G Y Y S V Q T T E G E Q I A Q L I A G



XbaI

HindIII

ACATCGATATCATCCTGAAGAAGAAAAAGCTAATGAGTCTAGAGGGCCCTATTCTATAGTGTACCTAAATGCTAAAGCTTGGCTGTTTTGGCGGATGAGAGAAGATT  
 TGTAGCTATAGTAGGACTTCTCTTTTTTTCGATTACTCAGATCTCCCGGATAAGATATCACAGTGGATTTACGATTTTGAACCGACAAAACCGCTACTCTCTTCTAA

1210

Talin head

Y I D I I L K K K S \*



TTCAGCCTGATACAGATTAATCAGAACGCAGAAGCGGTCTGATAAAACAGAATTTGCCCTGGCGGCAGTAGCGCGGTGGTCCCACCTGACCCCATGCCGAACCTCAGAAGT  
 AAGTCGGACTATGTCTAATTTAGTCTTGCCTTTCGCCAGACTATTTTGTCTTAAACGGACCGCCGTCATCGCGCCACCAAGGGTGGACTGGGGTACGGCTTGAGTCTTCA

1320

\* I L V C F R D S L V S N A Q R C Y R P P G V Q G W A S S L L



GGACTATGTCTAATTTAG

pTrcHis Reverse

GAAACGCCGTAGCGCCGATGGTAGTGTGGGGTCTCCCATGCGAGAGTAGGAACTGCCAGGCATCAAATAAACGAAAGGCTCAGTCGAAAGACTGGGCCTTTTCGTTTT  
 CTTTGGCGCATCGCGGTACCATCACACCCAGAGGGGTACGCTCTCATCCCTTGACGGTCCGTAGTTTATTTTGCTTTCCGAGTCAGCTTTCTGACCCGAAAGCAAAA

1430

S V G Y R R H Y H P T E G H S L L S S G P M L Y F S L S L R F V P G K T K



ATCTGTTGTTTGTGCGGTGAACGCTCTCCTGAGTAGGACAAATCCGCCGGGAGCGGATTTGAACGTTGCGAAGCAACGGCCCGGAGGGTGGCGGGCAGGACGCCGCCATA  
 TAGACAACAAACAGCCACTTGCAGAGGACTCATCCTGTTTAGGGCGCCCTCGCCTAAACTTGCAACGCTTCGTTGCCGGGCCCTCCACCCGCCCTCCTGCGGGCGGTAT

1540

D T T Q R H V S E Q T P C I R R S R I Q V N R L L P G S P P P C S A R W L



AACTGCCAGGCATCAAATTAAGCAGAAGGCCATCCTGACGGATGGCCTTTTTGCGTTTCTACAAACTCTTTTTGTTATTTTTCTAAATACATTCAAATATGTATCCGCT  
 TTGACGGTCCGTAGTTAATTCGCTTCCGGTAGGACTGCCTACCGGAAAACGCAAAGATGTTGAGAAAAACAAATAAAAAGATTATGTAAGTTTATACATAGGCGA

1650

M A F L R F Y K L F L F I F L N T F K Y V S A



S G P M



CATGAGACAATAACCCTGATAAATGCTTCAATAATTTGAAAAAGGAGAGTATGAGTATTCAACATTTCCGTGTGCGCCTTATCCCTTTTTGCGGCATTTTGCCTTC  
 GACTCTGTATTGGGACTATTTACGAAGTTATTATAACTTTTTCTTCTCATACTCATAAGTTGTAAGGCACAGCGGAATAAGGGAAAAACGCCGTA AACGGAAG

1760

H E T I T L I N A S I I L K K E E Y E Y S T F P C R P Y S L F C G I L P S

M S I Q H F R V A L I P F F A A F C L



CTGTTTTGCTCACCCAGAAACGCTGGTGAAGTAAAAGATGCTGAAGATCAGTTGGGTGCACGAGTGGGTACATCGAACTGGATCTCAACAGCGGTAAAGATCCTTGAG  
 GACAAAAACGAGTGGGCTTTGCGACCATTTCATTTTCTACGACTTCTAGTCAACCCACGTGCTCACCCAATGTAGCTTGACTAGAGTTGTCGCCATTCTAGGAACTC

1870

C F C S P R N A G E S K R C \*

P V F A H P E T L V K V K D A E D Q L G A R V G Y I E L D L N S G K I L E



AGTTTTGCCCCGAAGAACGTTTTCCAATGATGAGCACTTTTAAAGTTCTGCTATGTGGCGGGTATTATCCCGTGTGACGCGGGCAAGGCAACTCGGTCGCCGAT  
 TCAAAAGCGGGCTTCTGCAAAAGGTTACTACTCGTAAAATTTCAAGACGATACACCGGCCATAATAGGGCACAACCTGCGGCCGTTCTCGTTGAGCCAGCGCGTA

1980

S F R P E E R F P M M S T F K V L L C G A V L S R V D A G Q E Q L G R R I



ScaI

ACACTATTCTCAGAATGACTTGGTTGAGTACTACCAGTCACAGAAAAGCATCTTACGGATGGCATGACAGTAAGAGAATTATGCAAGTGTGCCATAACCATGAGTGATA  
 TGTGATAAGAGTCTTACTGAACCAACTCATGAGTGGTCAGTGTCTTTTCGTAGAATGCCTACCGTACTGTCATTCTTAAATACGTCACGACGGTATTGGTACTCACTAT

2090

H Y S Q N D L V E Y S P V T E K H L T D G M T V R E L C S A A I T M S D



**PvuI**

ACACTGCGGCCAACTTACTTCTGACAACGATCGGAGGACCGAAGGAGCTAACCGCTTTTTGCACAACATGGGGGATCATGTAACCTCGCCTTGATCGTTGGGAACCGGAG 2200  
 TGTGACGCCGGTTGAATGAAGACTGTTGCTAGCCTCCTGGCTTCTCGATTGGCGAAAAACGTGTTGTACCCCTAGTACATTGAGCGGAAGTACCAACCTTGGCCCTC  
 N T A A N L L L T T I G G P K E L T A F L H N M G D H V T R L D R W E P E →  
 \* T V R R S R Q S G S →

**FspI**

CTGAATGAAGCCATACCAAACGACGAGCGTGACACCACGATGCCTGTAGCAATGGCAACAACGTGGCGAACTATTAACCTGGCGAACTACTTACTCTAGCTTCCGGCA 2310  
 GACTTACTTCGGTATGGTTGCTGCTCGCACTGTGGTGTACGGACATCGTTACCGTTGTTGCAACGCGTTTGATAATTGACCGCTTGATGAATGAGATCGAAGGGCCGT  
 L N E A I P N D E R D T T M P V A M A T T L R K L L T G E L L T L A S R Q →  
 S F S A M G F S S R S V V I G T A I A V V N R L S N V P S S S V R A E R C →

**BglI**

ACAATTAATAGACTGGATGGAGGCGGATAAAGTTGCAGGACCACTTCTGCGCTCGGCCCTTCCGGTGGCTGGTTATTGCTGATAAATCTGGAGCCGGTGAGCGTGGGT 2420  
 TGTTAATTATCTGACCTACCTCCGCTATTTCAACGTCCTGGTGAAGACGCGAGCCGGGAAGGCCGACCGACCAATAACGACTATTTAGACCTCGGCCACTCGCACCCA  
 Q L I D W M E A D K V A G P L L R S A L P A G W F I A D K S G A G E R G →  
 C N I S Q I S A S L T A P G S R R E A R G A P Q N I A S L D P A P S R P D →

**AhdI**

CTCGCGGTATCATTGCAGCACTGGGGCCAGATGGTAAGCCCTCCCGTATCGTAGTTATCTACACGACGGGGAGTCAGGCAACTATGGATGAACGAAATAGACAGATCGCT 2530  
 GAGCGCCATAGTAACGTCGTGACCCCGTCTACCACTCGGGAGGGCATAGCATCAATAGATGTGCTGCCCTCAGTCCGTTGATACCTACTTGTCTTATCTGTCTAGCGA  
 S R G I I A A L G P D G K P S R I V V I Y T T G S Q A T M D E R N R Q I A →  
 R P I M →

GAGATAGGTGCTCACTGATTAAGCATTGGTAACGTGTGACACCAAGTTTACTCATATATACTTTAGATTGATTTAAAATTCATTTTTAATTTAAAAGGATCTAGGTGAA 2640  
 CTCTATCCACGGAGTGACTAATTCGTAACCATGACAGTCTGGTTCAAATGAGTATATGAAATCTAACTAAATTTGAAGTAAAAATTAATTTTCTAGATCCACTT  
 E I G A S L I K H W \* →

GATCCTTTTTGATAATCTCATGACCAAAATCCCTTAACGTGAGTTTTTCGTTCCACTGAGCGTCAGACCCCGTAGAAAAGATCAAAGGATCTTCTTGAGATCCTTTTTTTC 2750  
 CTAGGAAAACTATTAGAGTACTGGTTTTAGGGAATTGCACTCAAAGCAAGGTGACTCGCAGTCTGGGGCATCTTTTCTAGTTTCTTAGAAGAAGTCTAGGAAAAAAG

TGCGCGTAATCTGCTGCTTGCAAAACAAAAAACACCGCTACCAGCGGTGGTTTGTGTTGCCGGATCAAGAGCTACCAACTCTTTTTCCGAAGGTAAGTGGCTTCAAGCAGA 2860  
 ACGCGCATTAGACGACGAACGTTTGTTTTTTGGTGGCGATGGTCCGACCAACAAACGCGCTAGTTCTCGATGGTTGAGAAAAAGGCTTCCATTGACCGAAGTCGTCT

**AlwNI**

GCGCAGATACCAATACTGCTCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAACTCTGTAGCACCGCCTACATACCTCGCTCTGCTAATCCTGTTACCAGTGCC 2970  
 CGCGTCTATGGTTTATGACAGGAAGATCACATCGGCATCAATCCGGTGGTGAAGTTCTTGAGACATCGTGGCGGATGTATGGAGCGAGACGATTAGGACAATGGTCACCG

TGCTGCCAGTGCGGATAAGTCTGCTTACCAGGTTGGACTCAAGACGATAGTTACCGGATAAGGCGCAGCGGTGCGGCTGAACGGGGGTTCTGTCACACAGCCAGCT 3080  
 ACGACGGTACCGCTATTCAGCACAGAATGGCCAACTGAGTTCTGCTATCAATGGCTATTCGCGTCCGACGCCGACTTGCCCCCAAGCAGTGTGTCGGGTGCA

TGGAGCGAACGACCTACACCGAACTGAGATACCTACAGCGTGAAGTATGAGAAAGCGCCACGCTTCCCGAAGGGAGAAAGCGGACAGGTATCCGGTAAGCGGCAGGGTC 3190  
 ACCTCGCTTGTGGATGTGGCTTACTCTATGGATGTCGCACTCGATACTCTTTCGCGGTGCGAAGGGCTTCCCTCTTTCGCGCTGTCCATAGGCCATTGCGCGTCCAG

GGAACAGGAGAGCGCACGAGGGAGCTTCCAGGGGAAACGCCTGGTATCTTTATAGTCTGTGCGGTTTCCGCCACTCTGACTTGAGCGTGCATTTTTGTGATGCTCGTC 3300  
 CCTTGTCTCTCGCGTCTCCCTCGAAGGTCCTTTCGCGACCATAGAAATATCAGGACAGCCAAAGCGGTGGAGACTGAACTCGCAGCTAAAAACTACGAGCAG

**PciI**

AGGGGGCGGAGCCTATGGAAAAACGCCAGCAACGCGGCTTTTTACGGTTCCTGGCCTTTTGTGGCCTTTTGTGCGCTTTTGTGCTCACATGTTCTTTCCTGCGTTATCCCTGATTCTG 3410  
 TCCCCCGCTCGGATACCTTTTTCGCGTCTGTCGCGGAAAAATGCCAAGGACCGGAAACGACCGGAAACGAGTGTACAAGAAAGGACGCAATAGGGGACTAAGAC



