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      10      20      30      40      50      60      70      80      90
1  ATGGCGTTCAACTACCACGACCACGTGCTGGCGATGGACCCCGCGCGTTGGGGCCGCGGCCGCGAACCCCTAGCTTTGTCCCCGGAGGTGGTGGT
1  M A F N Y H D H V L A M D P A A V G A A A A N P S F V P G G G G

      106      116      126      136      146      156      166      176      186
97  GGCCTGGCCGGTGGGGGGCCGGGCTGGGAGAGGGAGAAGGCGGCCATCGCGGCGCACCCGCTGTACGAGCGCCTGCTCGAGGCGCACGTGCGCTGC
33  G V A G G G P G W E R E K A A I A A H P L Y E R L L E A H V A C

      202      212      222      232      242      252      262      272      282
193  CTCCGCGTCGCCACCCCGTGGACCAGCTCCCGCGCATCGACGCCAGATAGCCGCGAGGCCCGCCCATGGCGGCCGCCGCCGCGGCTGCGGCG
65  L R V A T P V D Q L P R I D A Q I A A R P P P M A A A A A A A A A

      298      308      318      328      338      348      358      368      378
289  GCGGGCGGAGCACACTCGGGAGGCGAGGAGCTCGACCTCTTCATGACGCATTATGTGCTGCTCCTCTGTTTCATTCAAGGAACAACCTCCAGCAGCAC
97  A G G A H S G G E E L D L F M T H Y V L L L C S F K E Q L Q Q H

      394      404      414      424      434      444      454      464      474
385  GTGCGTGTTCATGCGATGGAAGCAGTCATGGCTTGCTGGGAGCTTGAACAAACTTTACAAAGCCTTACAGGGGCATCTCCTGGTGAGGGCACTGGG
129  V R V H A M E A V M A C W E L E Q T L Q S L T G A S P G E G T G

      490      500      510      520      530      540      550      560      570
481  GCAACTATGTCTGATGATGAAGACAATCAGGTAGACAGTGAGAGCAACATGTTTGATGGAAATGAGGGGTCAGATGGAATGGGATTGGTCCATTA
161  A T M S D D E D N Q V D S E S N M F D G N E G S D G M G F G P L

      586      596      606      616      626      636      646      656      666
577  ATGTTGACTGAGGGTGAAAGATCCTTAGTTGAGCGTGTCCGGCAGGAGCTAAAGCATGAGCTTAAGCAGGGGTATAGAGACAAACTTGTGGATATT
193  M L T E G E R S L V E R V R Q E L K H E L K Q G Y R D K L V D I

      682      692      702      712      722      732      742      752      762
673  CGGGAAGAGATAATGCGGAAGCGAAGAGCTGGGAAACTCCCTGGCGACACTGCTTCTACCTTAAAGCTTGGTGGCAAGCTCATTCTAAGTGGCCA
225  R E E I M R K R R A G K L P G D T A S T L K A W W Q A H S K W P

      778      788      798      808      818      828      838      848      858
769  TACCCAACCGAGGAAGACAAGGCTCGACTGGTGCAGGAACAGGGCTACAACCTGAAGCAGATCAATAACTGGTTTATCAACCAGCGTAAGCGGAAC
257  Y P T E E D K A R L V Q E T G L Q L K Q I N N W F I N Q R K R N

      874      884      894      904      914      924      934
865  TGGCACACAACATCCGGCGTCATCCTCATCGGACAAAAGCAAGAGAAAAAGGTACGGTCACAAGAACTAGACTAA
289  W H N N P A S S S S D K S K R K R Y G H K K L D *

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Supplementary Figure S7 ORF sequence of *SsHB97* and its encoding protein. The protein marked with yellow color represents the Homeobox_KN (PF05920)