A

```
1      ATGGACCGGCTAACACTGTCACGCATAGACGACAATTTGGGAACGTCAGAAGTGGCTGCTCTCTGCTTCTTGTGTCTTGATGTTATCAAC
1       M  D  R  L  T  L  S  R  I  D  D  N  L  G  T  S  E  V  A  A  L  C  F  L  C  L  D  V  I  N

91     AGGAAACGCCTAGAGGGGATTACGGATGCAAGGGTTCTGTTCGAGAGACTAGAGAAAAATGTCTTCTGGAGAACCCTTCCTTCCTTTCT
31      R  K  R  L  E  G  I  T  D  A  R  V  L  F  E  R  L  E  E  K  C  L  L  E  N  P  S  F  L  S

181    CAGCTGCTCAGAACTATTCGCAGGGCAGACCTCGTCAGCCTGCTGGAGACAGACAGCAGCCCACCAGAAGAAACTGACTCGAATCCAATC
61      Q  L  L  R  T  I  R  R  A  D  L  V  S  L  L  E  T  D  S  S  P  P  E  E  T  D  S  N  P  I

271    CTGTCAGATTACAGGGTGATGCTGTACCAGATATATCAGGACGTGACTGAGAAAAATCTCGAAACGATGAAGTTTCTGTTGAGTGACAAG
91      L  S  D  Y  R  V  M  L  Y  Q  I  Y  Q  D  V  T  E  K  N  L  E  T  M  K  F  L  L  S  D  K

361    TTGGGCAGAGAGGCACATTGACACATGCCGTACGCCCCTGGACGTGTTCGCTGAGATGGAAAAGGTTGGTTTACTGTCGAGCACGAAGCTT
121     L  G  R  R  H  I  D  T  C  R  T  A  L  D  V  F  A  E  M  E  K  V  G  L  L  S  S  T  K  L

451    GATCATCTGTACACAACACTGTTGGAGTTCGATCGACAGCTGGCATCGACTGTTCACGACTACATGCAAGGTGGAACCGGCCGGGTCAC
151     D  H  L  Y  T  T  L  L  E  F  D  R  Q  L  A  S  T  V  H  D  Y  M  Q  G  V  N  R  P  G  H

541    ACTGCATCACTACCTCGTGTCAGCATGGATTACCAGAGGGTGAACAGCTCTCCTCAGGACAGGCACATGCACATGGTGGAACCTACTGAGACT
181     T  A  S  L  P  R  V  S  M  D  Y  Q  R  V  N  S  S  P  Q  Q  N  Q  T  T  L  S  I  S  E  T

631    CAGCCCAGAAATGTAGGACAGAGTGTTGTCCCTGATGCAGAACCAAACATTGAGTCCTCCTCTTCGCCTGATCCGACAGAATACTACACC
211     Q  P  R  N  V  G  Q  S  V  V  P  D  A  E  P  N  I  E  S  S  S  S  P  D  P  T  E  Y  Y  T

721    CTGACACGTAACCCTCGTGGCGTGTGTATGGTCATCAACAATGAGCAATTCCGTGGACCAGAGTTTAAAGATAGAGCCGGTACTCAGGAG
241     L  T  R  N  P  R  G  V  C  M  V  I  N  N  E  Q  F  R  G  P  E  F  K  D  R  A  G  T  Q  E

811    GATGAGAAGGCTCTCGAACGTGTTCACACAGCTTGGCTTTGACATGGAGGTGCACAACAACTTGACTGCAGAGACATGCGACGTGAA
271     D  E  K  A  L  C  N  V  F  T  Q  L  G  F  D  M  E  V  H  N  N  L  T  A  E  D  M  R  R  E

901    ATCAAAACCCTGGGCAAAAGGAATTTTTCCAGCCACGATGTCCTGGTGGTATGCGTGCTCTCACACGGGAGACATTGGGTGTGTGTTTGGG
301     I  K  T  L  G  K  R  N  F  S  S  H  D  V  L  V  V  C  V  L  S  H  G  D  C  V  F  G

991    ACTGATGAGAACAAGGTGTGTTTGAAGGAATTCACACAGCCCTTCACGAGCGTGAGAGCTCCCAGCTTAGCAGGGAAGCCCAAGCTGTTC
331     T  D  E  N  K  V  C  L  K  E  F  T  Q  P  F  T  S  V  R  A  P  S  L  A  G  K  P  K  L  F

1081   TTCATCCAGGCGTGTCAGGGAAGGGGCTACCAGTTCGGAGCCCAGCCATATGCCCTGAGCCAAGAGGAGGACGGGAGAGAGTATCTGGAG
361     F  I  Q  A  C  Q  G  R  G  Y  Q  F  G  A  Q  P  Y  A  L  S  Q  E  E  D  G  E  R  Y  L  E

1171   GACGACGCAGGTCCTGTACACGGCCAGACGGTGCCTGCGGAAGCTGACTTCCTGCTGGGCATGGCCGTGCCAGAGTGCAGGTCGTTT
391     D  D  A  G  P  V  H  G  Q  T  V  P  A  E  A  D  F  L  L  G  M  A  T  V  P  E  C  R  S  F

1261   CGAAACACTGTGTTAGGCTCCATCTACATCCAAGAGCTGTGTAGGCAGCTCCGAGGTCAGCAGATAGCGCTGCGAAGCAGATGACTATACTC
421     R  N  T  V  L  G  S  I  Y  I  Q  E  L  C  R  Q  L  L  R  S  A  D  S  A  A  N  D  D  I  L

1351   AGCATCCTGACACGTGTGAACAGGGAGGTCAGCAAAGGAGGTATAAAAGCTTCAAACAAATGCCAGAGCCCAAATACACCCTCACCAAG
451     S  I  L  T  R  V  N  R  E  V  S  K  G  E  Y  K  S  F  K  Q  M  P  E  P  K  Y  T  L  T  K

1441   AAGCTCGTCCTCAAACGTGTGTGA
481     K  L  V  L  K  R  V  *
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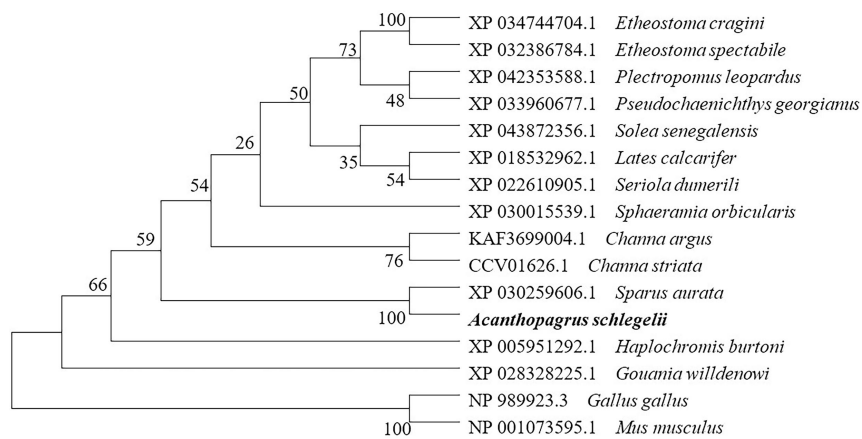
B

C

Fig. S2. *As*caspase-8 bioinformatics analysis. (A) The ORF sequence of caspase-8 and its amino acid sequence. In the figure, the start codon (ATG) and end codon (TGA) are marked. The area underlined in red font is the DED domain, and the area underlined in black font is the CASc domain. (B) Multiple comparisons of amino acid sequences of caspase-8 and other species of caspase-8. (C) caspase-8 amino acid sequence phylogenetic tree.