

Ostrinia furnacalis : -----MSGENDRVSTTC : 12
Helicoverpa armigera : -----MSGENDRVSTTC : 12
Spodoptera frugiperda : -----MSGENDRVSTTC : 12
Manduca sexta : -----MSG-NDNRVSTTC : 11
Bombyx mori : -----MSGENDRVSTTC : 12
Leptinotarsa decemlineata : -----MSSNNQSGTTC : 12
Tribolium castaneum : -----MSSNNQSLSTTC : 12
Aedes aegypti : -----MSSQFP-----NCQGNNAFTQCC-----SGGSGTGG-----N : 28
Drosophila melanogaster : -----MSPACSNSSSSQSQSAACCCOCCNQRANVNNTHENKNAARTGTAGSGSGGAGSAGTCCQCGGTTSSGSPSPKRSITSTR : 87
Araneus ventricosus : -----MSANSTVNSSL : 12
Schistosoma japonicum : -----MSTNAVASNSLT : 14
Homo sapiens : -----MSEKKAIDPFLSTTL : 15
Oryctolagus cuniculus : -----MAAPEFAAAPEPPPEPPFPGAL : 24
Mus musculus : -----MSEKKAIDPFLSTTL : 15
Gallus gallus : -----MSEKKAIDPFLSTTL : 15
Anas platyrhynchos : ----- : 15
Aspergillus fumigatus : -----MCALARAARVCKKVPFETDILHTMEDG-----TQVSTI : 34

Ostrinia furnacalis : -----MICSVAFPHSRKIVSEVFEKTCGFLFDVLRCFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 100
Helicoverpa armigera : -----MICSVAFPHSRKIVSEVFEKSGFLFEVLRICFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 100
Spodoptera frugiperda : -----MICSVAFPHSRKIVSEVFEKSGFLFEVLRICFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 100
Manduca sexta : -----MICSVAFPHSRKIVSEVFEKTCGFLFDVLRCFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 100
Bombyx mori : -----MICSVAFPHSRKIVSEVFEKTCGFLFDVLRCFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 100
Leptinotarsa decemlineata : -----MICAFAFPHSRKIVSEVFEKTCGFLFDVLRCFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 100
Tribolium castaneum : -----MICAFAFPHSRKIVSEVFEKTCGFLFDVLRCFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 100
Aedes aegypti : -----MIVLSAFPHSRKICADVEKARTCGFHDVLRCFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 117
Drosophila melanogaster : -----MIVLSAFPHSRKICADVEKARTCGFHDVLRCFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 176
Araneus ventricosus : -----MIVRSFPHSRKIVSEVFEKTCGFLFDVLRCFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 100
Schistosoma japonicum : -----MIVRSFPHSRKIVSEVFEKTCGFLFDVLRCFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 101
Homo sapiens : -----MIVRAHFPHSRKIVSEVFEKTCGFLFDVLRCFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 102
Oryctolagus cuniculus : -----MIVRAHFPHSRKIVSEVFEKTCGFLFDVLRCFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 111
Mus musculus : -----MIVRAHFPHSRKIVSEVFEKTCGFLFDVLRCFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 102
Gallus gallus : -----MIVRAHFPHSRKIVSEVFEKTCGFLFDVLRCFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 102
Anas platyrhynchos : -----MIVRAHFPHSRKIVSEVFEKTCGFLFDVLRCFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 85
Aspergillus fumigatus : -----MIVRAHFPHSRKIVSEVFEKTCGFLFDVLRCFPIEGREBNPAHETICQALISEKQVMEHDSPTVCGDHGCVLMLKLF : 124
E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N

Ostrinia furnacalis : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 190
Helicoverpa armigera : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 190
Spodoptera frugiperda : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 190
Manduca sexta : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 189
Bombyx mori : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 190
Leptinotarsa decemlineata : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 190
Tribolium castaneum : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 190
Aedes aegypti : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 207
Drosophila melanogaster : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 266
Araneus ventricosus : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 190
Schistosoma japonicum : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 191
Homo sapiens : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 192
Oryctolagus cuniculus : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 201
Mus musculus : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 201
Gallus gallus : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 192
Anas platyrhynchos : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 175
Aspergillus fumigatus : -----E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N : 214
E6G6 P T4YFLGCDYVDRGYSIECVIYIM IK6 yf 315LIRGNHCRHLYETTFQECRIY3E 6YGA6 aFqCPLIAA66N

Ostrinia furnacalis : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 280
Helicoverpa armigera : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 280
Spodoptera frugiperda : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 280
Manduca sexta : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 279
Bombyx mori : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 280
Leptinotarsa decemlineata : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 280
Tribolium castaneum : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 280
Aedes aegypti : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 297
Drosophila melanogaster : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 356
Araneus ventricosus : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 280
Schistosoma japonicum : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 281
Homo sapiens : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 282
Oryctolagus cuniculus : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 291
Mus musculus : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 282
Gallus gallus : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 282
Anas platyrhynchos : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 265
Aspergillus fumigatus : -----CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH : 304
CFLCHGGISPEINLIDIRIDREKEFPFGCMCDILWSCPIEDFGNEFNABHSSNVVRGCSFYFYACQCFIFGNLLSIRAH

Ostrinia furnacalis : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 370
Helicoverpa armigera : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 370
Spodoptera frugiperda : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 370
Manduca sexta : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 369
Bombyx mori : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 370
Leptinotarsa decemlineata : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 370
Tribolium castaneum : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 370
Aedes aegypti : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 387
Drosophila melanogaster : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 446
Araneus ventricosus : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 370
Schistosoma japonicum : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 371
Homo sapiens : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 372
Oryctolagus cuniculus : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 381
Mus musculus : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 372
Gallus gallus : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 372
Anas platyrhynchos : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 355
Aspergillus fumigatus : -----ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC : 394
ACDAGYMYRKSQTTFSSITIFSAPNVILVYNNKAA LKYENNVMNIRQFNCSEHYWLPNFMVFTWSLFPVGEKTEMVNVNINIC

Ostrinia furnacalis : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 443
Helicoverpa armigera : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 443
Spodoptera frugiperda : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 443
Manduca sexta : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 442
Bombyx mori : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 443
Leptinotarsa decemlineata : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 454
Tribolium castaneum : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 444
Aedes aegypti : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 460
Drosophila melanogaster : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 522
Araneus ventricosus : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 448
Schistosoma japonicum : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 446
Homo sapiens : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 446
Oryctolagus cuniculus : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 458
Mus musculus : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 446
Gallus gallus : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 446
Anas platyrhynchos : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 433
Aspergillus fumigatus : -----SEIEIMSGD-----ALEP-----NLRREVINKKIAIKRMHVSFLREESSEVLQKGLTTPGALHGLGGGRTSKN : 479
SgDEI e d a 44e I4NKIrAIG46a vF VLREESSEVL LKglTtG LF G LsgG 6

Ostrinia furnacalis : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 495
Helicoverpa armigera : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 495
Spodoptera frugiperda : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 495
Manduca sexta : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 494
Bombyx mori : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 495
Leptinotarsa decemlineata : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 509
Tribolium castaneum : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 498
Aedes aegypti : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 509
Drosophila melanogaster : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 584
Araneus ventricosus : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 503
Schistosoma japonicum : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 528
Homo sapiens : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 511
Oryctolagus cuniculus : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 524
Mus musculus : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 511
Gallus gallus : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 510
Anas platyrhynchos : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 499
Aspergillus fumigatus : -----LQFSNRTTSEBAGKILAINERNPPRGGTPTACEK-----KHYVNN-----AHS----- : 542
a gfsp h ItsF A4g D NER6PPz d

Figure S1. Amino acid sequence alignment for CaNs of *O. furnacalis* and other species. The black, dark grey, light gray and colourless areas respectively indicate the 90–100%, 80–90%, 60–80% and lower than 60% similarity/identity. Specific names and GenBank IDs: *O. furnacalis*, XP_028156950.1; *Helicoverpa armigera*, XP_021181213.1; *Spodoptera frugiperda*, XP_035436316.1; *Manduca sexta*, XP_030032629.1; *Bombyx mori*, NP_001037025.1; *Leptinotarsa decemlineata*, XP_023017364.1; *Tribolium castaneum*, EEZ99522.2; *Aedes aegypti*, XP_021707011.1; *Drosophila melanogaster*, NP_001259622.1; *Araneus ventricosus*, GBL91594.1; *Schistosoma japonicum*, KAH8863363.1; *Homo sapiens*, NP_001124163.1; *Oryctolagus cuniculus*, NP_001076196.1; *Mus musculus*, NP_001280551.1; *Gallus gallus*, XP_040527134.1; *Anas platyrhynchos*, EOB04152.1; *Aspergillus fumigatus*, KAF4282405.1.

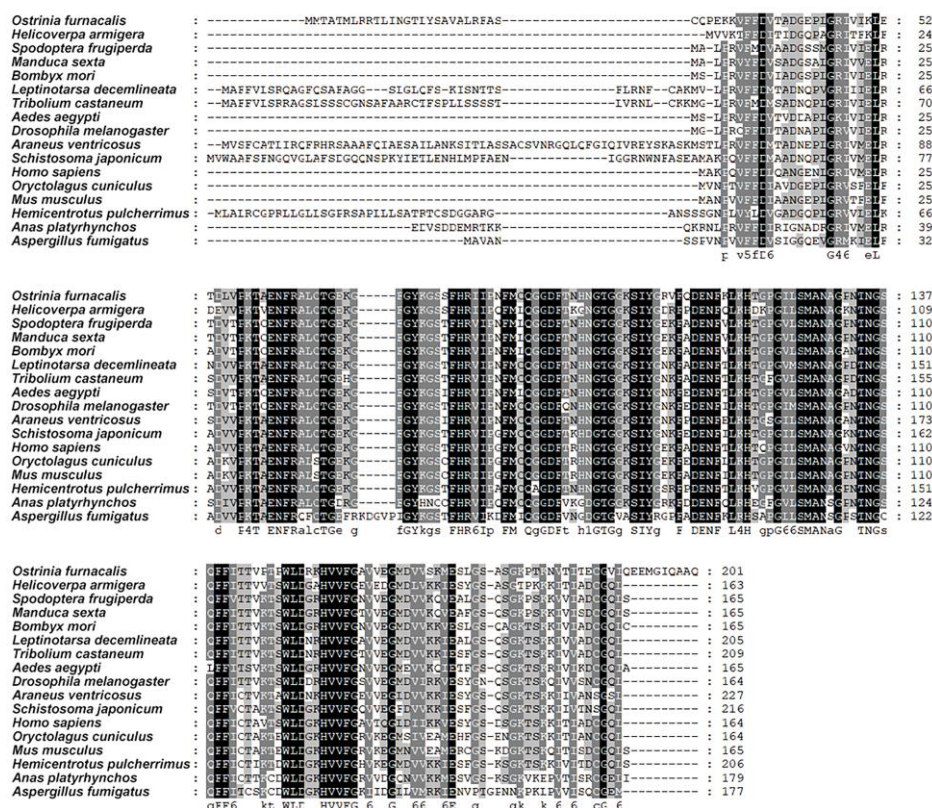


Figure S2. Amino acid sequence alignment for cyclophilins of *O. furnacalis* and other species. The similarity/identity of amino acid sequences of 90–100%, 80–90%, 60–80% and lower than 60% were respectively displayed with black, dark grey, light gray

and colourless areas. Specific names and GenBank IDs: *O. furnacalis*, XP_028172843.1; *H. armigera*, XP_021200657.1; *S. frugiperda*, XP_035453679.1; *M. sexta*, XP_030031426.1; *B. mori*, NP_001037301.1; *L. decemlineata*, XP_023012814.1; *T. castaneum*, EEZ98965.2; *A. aegypti*, ABF18058.1; *D. melanogaster*, NP_523366.2; *Araneus ventricosus*, GBL90912.1; *S. japonicum*, AAA29863.1; *H. sapiens*, AAC51927.1; *O. cuniculus*, AAF22215.1; *M. Musculus*, NP_598845.1; *Hemicentrotus pulcherrimus*, AAB37708.1; *A. platyrhynchos*, AJR16770.1; *A. fumigatus*, CAI78448.1.