

Supplementary Table 1 This table lists all the proteins used in the phylogenetic analysis (Fig 2). Each protein included in the alignment (Supp Fig 1) is listed with the abbreviation used in the alignment with the full species name and accession number

| Species, HSP70 abbreviation | Accession number or Proteins ID |
|----------------------------------|---------------------------------|
| <i>Arabidopsis thaliana</i> | |
| Athsp70-1 | AT5G02500 |
| Athsp70-2 | AT5G02490 |
| Athsp70-3 | AT3G09440 |
| Athsp70-4 | AT3G12580 |
| Athsp70-5 | AT1G16030 |
| Athsp70-6 | AT4G24280 |
| Athsp70-7 | AT5G49910 |
| Athsp70-8 | AT4G37910 |
| Athsp70-9 | AT5G09590 |
| Athsp70-10 | AT5G28540 |
| Athsp70-11 | AT5G42020 |
| Athsp70-12 | AT1G09080 |
| Athsp70-13 | AT1G56410 |
| <i>Chlamydomonas reinhardtii</i> | |
| Crhsp70-1 | 126835 |
| Crhsp70-2 | 137452 |
| Crhsp70-3 | 185673 |
| Crhsp70-4 | 133650 |
| Crhsp70-5 | 133859 |
| <i>Cyanidium caldarium</i> | |
| Cchsp70-1 | AAF12906 |
| <i>Cyanidioschyzon merolae</i> | |
| Cmhs70-1 | 5604 |
| Cmhs70-2 | 1601 |
| Cmhs70-3 | 3804 |
| Cmhs70-4 | 914 |
| <i>Escherichia coli</i> | |
| DnaK | P04475 |
| <i>Gracilaria tenuistipitata</i> | |
| Gthsp70-1 | AAT79683 |
| <i>Guillardia theta</i> | |
| Guthsp70-1 | AAC35702 |
| <i>Odontella sinensis</i> | |
| Oshsp70-1 | CAA91650 |
| <i>Oryza sativa</i> | |
| Orshsp70-1 | LOC_Os03gl6920 |
| Orshsp70-2 | LOC_Os03gl6860 |
| Orshsp70-3 | LOC_Os05g38530 |
| Orshsp70-4 | LOC_Os01g62290 |
| Orshsp70-5 | LOC_Os11g47760 |
| Orshsp70-6 | LOC_Os03g60620 |
| Orshsp70-7 | LOC_Os12g14070 |
| Orshsp70-8 | LOC_Os05g23740 |
| Orshsp70-9 | LOC_Os02g53420 |
| Orshsp70-10 | LOC_Os03g02260 |
| Orshsp70-11 | LOC_Os09g31486 |
| Orshsp70-12 | LOC_Os02g02410 |
| Orshsp70-13 | LOC_Os03g50250 |
| Orshsp70-14 | LOC_Os05g30480 |
| Orshsp70-15 | LOC_Os08g09770 |
| Orshsp70-16 | LOC_Os05g35400 |
| <i>Ostreococcus lucimarinus</i> | |
| Olhsp70-1 | 48839 |
| Olhsp70-2 | 15148 |
| Olhsp70-3 | 44780 |
| Olhsp70-4 | 28169 |
| Olhsp70-5 | 12592 |

Supplementary Table 1 Continued

| Species, HSP70 abbreviation | Accession number or Proteins ID |
|---|---------------------------------|
| <i>Ostreococcus tauri</i> | |
| Othsp70-1 | 15769 |
| Othsp70-2 | 28374 |
| Othsp70-3 | 28024 |
| Othsp70-4 | 22076 |
| Othsp70-5 | 15909 |
| <i>Plasmodium falciparum</i> | |
| Pfhs70-1 | PF08.0054 |
| Pfhs70-2 | PF10875W |
| Pfhs70-3 | PF11.O351 |
| Pfhs70-4 | PF07.0033 |
| <i>Plasmodium yoelli</i> | |
| Pyhs70-1 | PY05001 |
| Pyhs70-2 | PY06158 |
| Pyhs70-3 | PY06981 |
| Phhs70-1 | ABF20063 |
| <i>Porphorya haitanensis</i> | |
| Phhs70-1 | ABF20063 |
| <i>Porphorya purpurea</i> | |
| Pophsp70-1 | AAC08201 |
| <i>Porphorya yezoensis</i> | |
| Poyhs70-1 | ABF54971 |
| <i>Saccharomyces cerevisiae</i> | |
| ECM10 | S50429 |
| SSC1 | M27229 |
| KAR2 | M25064 |
| SSB1 | CAA31995 |
| SSB2 | S50721 |
| SSA1 | P10591 |
| SSA2 | P10592 |
| SSA3 | S36753 |
| SSA4 | B36590 |
| <i>Synechocystis</i> sp. strain PCC6803 | |
| SynDnaK1 | Q55154 |
| SynDnaK1 | P22358 |
| SynDnaK1 | P73098 |
| <i>Thalassiosira pseudonana</i> | |
| Tphsp70-1 | YP_874583 |
| Tphsp70-2 | 269240 |
| Tphsp70-3 | 28189 |
| Tphsp70-4 | 269120 |
| Tphsp70-5 | 27656 |

HSP, heat shock protein.

| | | | | | | |
|-------------|------------|-------------|------------|------------|------------|-------|
| Athsp70-1 | GIDLGTTYSC | VGWQHDRVE | IIANDQGNRT | TPSYVAFTDS | ERLIGDAAKN | [50] |
| Athsp70-2 | GIDLGTTYSC | VGWQHDRVE | IIANDQGNRT | TPSYVAFTDS | ERLIGDAAKN | [50] |
| Athsp70-3 | GIDLGTTYSC | VGWQHDRVE | IIANDQGNRT | TPSYVAFTDS | ERLIGDAAKN | [50] |
| Athsp70-4 | GIDLGTTYSC | VGWQHDRVE | IIANDQGNRT | TPSYVAFTDS | ERLIGDAAKN | [50] |
| Athsp70-5 | GIDLGTTYSC | VGWVMDRVE | IIPNDQGNRT | TPSYVAFTDT | ERLIGDAAKN | [50] |
| Orhsp70-5 | GIDLGTTYSC | VGWQHDRVE | IIANDQGNRT | TPSYVGFTDS | ERLIGDAAKN | [50] |
| Orhsp70-3 | GIDLGTTYSC | VGWQHDRVE | IIANDQGNRT | TPSYVAFTDT | ERLIGDAAKN | [50] |
| Orhsp70-6 | GIDLGTTYSC | VGWQHDRVE | IIANDQGNRT | TPSYVGFTDT | ERLIGDAAKN | [50] |
| Orhsp70-1 | GIDLGTTYSC | VGWQHDRVE | IIANDQGNRT | TPSYVAFTDT | ERLIGDAAKN | [50] |
| Crhsp70-3 | GIDLGTTYSC | VGWQHDRVE | IIANDQGNRT | TPSYVAFTDT | ERLIGDAAKN | [50] |
| Olhsp70-4 | GIDLGTTYSC | VGWQHDRVE | IIANDQGNRT | TPSYVAFTDS | ERLIGDSAKN | [50] |
| Othsp70-5 | GIDLGTTNSA | VAAMEGGSPT | IVTNAEGGRT | TPSVVAYTKS | DRLVGQIAKR | [50] |
| Tphsp70-4 | GIDLGTTYSC | VGWQHDRVE | IIANDQGNRT | TPSYVAFTET | ERLIGDAAKS | [50] |
| Pfhsp70-2 | GIDLGTTYSC | VGVFKNGRVE | ILNNELGRI | TPSYVSFVDG | ERKVGEAAKL | [50] |
| ScSCSSA1 | GIDLGTTYSC | VAHFANDRVD | IIANDQGNRT | TPSFVAFTDT | ERLIGDAAKN | [50] |
| ScSCSSA2 | GIDLGTTYSC | VAHFSNDRVD | IIANDQGNRT | TPSFVGFTDT | ERLIGDAAKN | [50] |
| ScSCSSA3 | GIDLGTTYSC | VAHFSNDRVE | IIANDQGNRT | TPSYVAFTDT | ERLIGDAAKN | [50] |
| SCSCSSA4 | GIDLGTTYSC | VAHFANDRVE | IIANDQGNRT | TPSYVAFTDT | ERLIGDAAKN | [50] |
| Cmhsp70-3 | GIDLGTTYSC | VAVMEGNKVE | IIANEQGNRT | TPSYVAFTET | ERLIGDAAKN | [50] |
| Pyhsp70-3 | GIDLGTTNSC | VAIMEGKQGK | VIENAEGFRT | TPSVVAFTND | QRLVGIVAKR | [50] |
| Athsp70-11 | GIDLGTTYSC | VGVIKNGHVE | IIANDQGNRI | TPSWVGFTDS | ERLIGEAAKN | [50] |
| Athsp70-12 | GIDLGTTYSC | VGVIYHNKHVE | IIANDQGNRI | TPSWVAFTDT | ERLIGEAAKN | [50] |
| Athsp70-13 | GIDLGTTYSC | VGWQHDRVE | IIANDQGNRT | TPSYVAFTDS | ERLIGDAAKN | [50] |
| Crhsp70-4 | GIDLGTTYSC | VGVIKNGRVE | IIANDQGNRI | TPSYVAFTDE | ERLIGDAAKN | [50] |
| Crhsp70-5 | GIDLGTTYSC | VGVIKNGRVE | IIANDQGNRI | TPSYVAFTDE | ERLIGDAAKN | [50] |
| Olhsp70-3 | GIDLGTTYSC | VGAYVNGKVE | IIANDQGNRI | TPSYVAFTDS | ERLIGDSAKN | [50] |
| Othsp70-1 | GIDLGTTYSC | VGAYVNGKVE | IIANDQGNRI | TPSYVAFTDT | ERLIGDSAKN | [50] |
| ScSCKAR2 | GIDLGTTYSC | VAVMKNGKTE | ILANEQGNRI | TPSYVAFTDD | ERLIGDAAKN | [50] |
| Orshsp70-15 | GIDLGTTYSC | VGVIYRNGHVE | IIANDQGNRI | TPSWVAFTDG | ERLIGEAAKN | [50] |
| Orshsp70-15 | GIDLGTTYSC | VGVIYRNDRVE | IIANDQGNRI | TPSWVAFTDG | ERLIGEAAKN | [50] |
| Orshsp70-14 | GIDLGTTYSC | VGVIYRNGHVE | IIANDQGNRI | TPSWVAFTGG | ERLIGEAAKN | [50] |
| Orshsp70-13 | GIDLGTTYSC | VGVIYRNGHVD | IVANDQGNRI | TPSWVAFTDD | ERLVGEAAKN | [50] |
| Orshsp70-12 | GIDLGTTYSC | VGVIKNGHVE | IIANDQGNRI | TPSWVAFTDS | ERLIGEAAKN | [50] |
| Cmhsp70-4 | GIDLGTTYSC | VGVFKNGKVE | IIANEQGNRI | TPSYVAFTDK | ERLIGDAAKN | [50] |
| Orhsp70-9 | GIDLGTTYSC | VGWQHDRVE | IIANDQGNRT | TPSYVAFTDS | ERLIGDAAKN | [50] |
| Tphsp70-5 | GIDLGTTYSC | VGVFKNGRVE | IMANDQGNRI | TPSYVAFMDN | ERLVGDAAKN | [50] |
| Olhsp70-5 | GIDLGTTYSC | VSVWRNGEAH | VLTNAEGDRT | TPSWVAFTEQ | GRLVGDAAKR | [50] |
| Pfhsp70-3 | GIDLGTTNSC | VAIMEGKQGK | VIENSEGFRT | TPSVVAFTND | QRLVGIVAKR | [50] |
| Pyhsp70-1 | GIDLGTTYSC | VGVFKNGRVE | ILNNDLGNRI | TPSYVSFVDG | ERKVGEAAKL | [50] |
| ScSSB1 | GIDLGTTYSC | VATYESS-VE | IIANEQGNRV | TPSFVAFTPE | ERLIGDAAKN | [50] |
| ScSSB2 | GIDLGTTYSC | VATYESS-VE | IIANEQGNRV | TPSFVAFTPQ | ERLIGDAAKN | [50] |
| Tphsp70-3 | GIDLGTTFSC | VACWDDKTNK | VEVISPSGRT | CPSWVSFTKE | GKLVGTAAKS | [50] |
| Othsp70-2 | GIDLGTTYSC | VSVWRNGEAH | VLTNAEGDRT | TPSWVAFTEQ | GRLIGDTAKR | [50] |
| Othsp70-4 | GIDLGTTYSC | VGWQHDRVE | IIANDMGNRT | TPSYVAFTDS | ERLIGDSAKN | [50] |

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|-------------|------------|------------|------------|-------------|------------|--------|
| EcoliDnaK | GIDLGTTNSC | VAIMDGTTPR | VLENAEGDRT | TPSIIAYTQD | ETLVGQPAKR | [50] |
| Orshsp70-9 | GIDLGTTNSC | VSVMEGKNPK | VIENSEGTRT | TPSVVAFNQK | ERLVGTPAKR | [50] |
| Orshsp70-11 | GIDLGTTNSC | VSVMEGKTPR | VIENAEGART | TPSIVAKNQN | DLLVGITASR | [50] |
| Orshsp70-10 | GIDLGTTNSC | VSVMEGKNPK | VIENSEGTRT | TPSVVAFNQK | ELLVGTAKR | [50] |
| Athsp70-10 | GIDLGTTYSC | VGVIKNGHVE | IIANDQGNRI | TPSWVGFTDS | ERLIGEAANK | [50] |
| Athsp70-9 | GIDLGTTNSC | VAVMEGKNPK | VIENAEGART | TPSVVAFNTK | ELLVGTAKR | [50] |
| Orshsp70-4 | GIDLGTTYSC | VGVMQHDRVE | IIANDQGNRT | TPSYVAFTDS | ERLIGDAAKN | [50] |
| Crhsp70-2 | ----- | ---MEGKSPR | VIENAEGART | TPSVIAFTDK | ERLVGLPAKR | [50] |
| Olhsp70-2 | ----- | ---MEGKNAR | VIENAEGART | TPSMVAFTDK | ERLVGQPAKR | [50] |
| Othsp70-3 | GIDLGTTNSC | VAVMEGKNAR | VIENAEGART | TPSMVAFTDK | ERLVGQPAKR | [50] |
| Tphsp70-2 | GIDLGTTNSC | VAIMEGRNAR | VIENSEGART | TPSVVAITDD | TRLVGMMAKR | [50] |
| Cmhs702 | GIDLGTTNSC | VAIMEGKAPR | VIENAEGQRT | TPSVVAFTSS | ERLVGIAAKR | [50] |
| ScECM10 | GIDLGTTNSA | VAIMEGKVPR | IIENAEGSRT | TPSVVAFTKD | ERLVGEPAKR | [50] |
| ScSSC1 | GIDLGTTNSA | VAIMEGKVPK | IIENAEGSRT | TPSVVAFTKE | ERLVGIPAKR | [50] |
| Orshsp70-8 | GIDLGTTNSA | VAAMEGGKPT | IVTNAEGART | TPSVVAYTKS | DRLVGQIAKR | [50] |
| Orshsp70-7 | GIDLGTTNSA | VAAMEGGKPT | VITNAEGQRT | TPSVVAYTKG | ERLVGQIAKR | [50] |
| Athsp70-6 | GIDLGTTNSA | VAAMEGGKPT | IVTNAEGQRT | TPSVVAYTKS | DRLVGQIAKR | [50] |
| Athsp70-7 | GIDLGTTNSA | VAAMEGGKPT | IVTNAEGQRT | TPSVVAYTKS | DRLVGQIAKR | [50] |
| Cchsp70-1 | GIDLGTTNSV | IAVMEMGKPA | VIPNSEGFRT | TPSVVAYAKN | DLLVGQIAKR | [50] |
| Cmhs70-1 | GIDLGTTNSV | IAVMEGGQPT | VVPNSEGFRT | TPSVVAYTKN | DLLVGQIAKR | [50] |
| Athsp70-8 | GIDLGTTNSC | VSVMEGKTAR | VIENAEGSRT | TPSVVAMNQK | ELLVGTAKR | [50] |
| Crhsp70-1 | GIDLGTTNSA | VAAMEGGKPT | IITNAEGGRT | TPSVVAFTKT | DRLVGQIAKR | [50] |
| Gthsp70-1 | GIDLGTTNSV | IAVMEGGKPT | VIPNKEGLRT | TPSVVAYTKK | DKLVGQIAKR | [50] |
| Guthsp70-1 | GIDLGTTNSV | VAVMEGGKPA | VIQNAEGFRT | TPSVVAYTKT | DRLVGQIAKR | [50] |
| Olhsp70-1 | GIDLGTTNSA | VAAMEGGSPT | IVTNAEGGRT | TPSVVAYTKT | DRLVGQIAKR | [50] |
| Oshsp70-1 | GIDLGTTNSV | VAAIEGGQPS | VIVNAEGLRT | TPSIVAYTKK | ELLVGQIAKR | [50] |
| Pfhs70-1 | GIDLGTTYSC | VGVWRNENVD | IIANDQGNRT | TPSYVAFTDT | ERLIGDAAKN | [50] |
| Phhs70-1 | GIDLGTTNSV | IAVMEGGKPT | VIPNAEGFRT | TASVVAYTKS | DKLVGQIARR | [50] |
| Pophsp70-1 | GIDLGTTNSV | IAVMEGGKPT | VIPNAEGFRT | TASVVAYTKS | DKLVGQIARR | [50] |
| Poyhsp70-1 | GIDLGTTNSV | IAVMEGGKPT | VIPNAEGFRT | TASVVAYTKS | DKLVGQIARR | [50] |
| Pyhs702 | GIDLGTTYSC | VGVWRNENVD | IIANDQGNRT | TPSYVAFTDT | ERLIGDAAKN | [50] |
| SynDnaK1 | GIDLGTTNSC | ASVLEGGKPI | VITNTEGGRT | TPSIVGFTKG | QRLVGQLAKR | [50] |
| SynDnaK2 | GIDLGTTNSC | VAVMEGGKPT | VIANAEGFRT | TPSVVGYAKN | DRLVGQIAKR | [50] |
| SynDnaK3 | GIDLGTTNSV | VAVMEGGKPI | VIANAEGMRT | TPSVVGFNKE | ELVVGQMGRR | [50] |
| Tphsp70-1 | GIDLGTTNSV | VAAIEGGQPT | VITNAEGFRT | TPSIVAYTKK | ELLVGQLAKR | [50] |
| | | | | | | |
| Athsp70-1 | QVAMNPVNTV | FDAKRLIGRR | FSDSSVQSDM | KLWPFKIQAG | -PADKPMIYV | [100] |
| Athsp70-2 | QVAMNPVNTV | FDAKRLIGRR | FSDASVQSDR | QLWPFTHIISG | -TAEKPMIVV | [100] |
| Athsp70-3 | QVAMNPINTV | FDAKRLIGRR | FTDSSVQSDI | KLWPFTHLKS | -PAEKPMIVV | [100] |
| Athsp70-4 | QVAMNPNTV | FDAKRLIGRR | YSDPSVQADK | SHWPFKVVSG | -PGEKPMIVV | [100] |
| Athsp70-5 | QVALNPQNTV | FDAKRLIGRK | FSDPSVQSDI | LHWPFKVVSG | -PGEKPMIVV | [100] |
| Orshsp70-5 | QVAMNPINTV | FDAKRLIGRR | FSDASVQSDI | KLWPFKVIAG | -PGDKPMIVV | [100] |
| Orshsp70-3 | QVAMNPNTV | FDAKRLIGRR | FSDPSVQSDM | KLWPFKVVPG | -PGDKPMIVV | [100] |
| Orshsp70-6 | QVAMNPINTV | FDAKRLIGRR | FSDASVQSDI | KMWPYKVIPG | -PGDKPMIVV | [100] |
| Orshsp70-1 | QVAMNPNTV | FDAKRLIGRR | FSDPSVQADM | KMWPYKVVPG | -PADKPMIVV | [100] |
| Crhsp70-3 | QVAMNPRHTV | FDAKRLIGRK | FSDPIVQADI | KLWPFQVRAG | -AHDVPEIVV | [100] |
| Olhsp70-4 | QTAMNPMNTV | FDAKRLIGRK | FSEPQVQADI | KDWSFKVEAG | -EADKPMIVV | [100] |
| Othsp70-5 | QAVVNPQNTF | ASVKRFIGRK | MDE--VKSES | KEIPYSVUNA | -SGNVKIDCP | [100] |

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|-------------|-------|
| Tphsp70-4 | QAAMNASNTV | FDAKRLIGRK | FSDPGVQSDM | KHWPFKVIPG | -TGGTPIIEV | [100] |
| Pfhsp70-2 | EATLHPTQTV | FDVKRLIGRK | FDDQEVVKDR | SLLPYEIVNN | -QG-KPNIKV | [100] |
| ScSSA1 | QAAMNPSNTV | FDAKRLIGRN | FNDPEVQADM | KHFPPKLIIDV | -DG-KPQIQV | [100] |
| ScSSA2 | QAAMNPANTV | FDAKRLIGRN | FNDPEVQADM | KHFPPKLIIDV | -DG-KPQIQV | [100] |
| ScSSA3 | QAAINPHNTV | FDAKRLIGRK | FDDPEVTTDA | KHFPPKVISR | -DG-KPVVQV | [100] |
| ScSSA4 | QAAMNPHTV | FDAKRLIGRK | FDDPEVTNDA | KHYPPKVIDK | -GG-KPVVQV | [100] |
| Cmhsp70-3 | QVALNPENTV | FDAKRLIGRK | FSDPTVQEDM | KHWPFKVVQG | -PGDKPLIQV | [100] |
| Pyhsp70-3 | QAITNPENTV | YATKRFIGRK | FDEDATKKEQ | KNLPYKIVRA | PNGD-AWIEA | [100] |
| Athsp70-11 | QAAVNPERTV | FDVKRLIGRK | FEDKEVQKDR | KLVPYQIVNK | -DG-KPYIQV | [100] |
| Athsp70-12 | QAAKNPERTI | FDPKRLIGRK | FDDPDVQRDI | KFLPYKVVNK | -DG-KPYIQV | [100] |
| Athsp70-13 | QVAMNPVNTV | FDAKRLIGRR | FSDASVQSDM | KFWPFKVTGP | -QADKPMIFV | [100] |
| Crhsp70-4 | QATVNPKRTI | YDVKRLIGRK | FSDADVQRDR | KLVSYDIVDR | -QG-KPYVAV | [100] |
| Crhsp70-5 | QATVNPKRTV | YDVKRLIGRK | YEDKEVQRDK | KLVSYDIVDR | -QG-KPYVAV | [100] |
| Olhsp70-3 | QASANPRTV | FDAKRLIGRK | FTDKEVQRDL | KMFPFKVVDK | -DS-KPCIEV | [100] |
| Othsp70-1 | QASANPRTV | FDAKRLIGRK | FTDKEVQRDL | KMFPFKIVDK | -DS-KPCIEI | [100] |
| ScKAR2 | QVAANPQNTI | FDIKRLIGLK | YNDRSVQKDI | KHLPFNVVNK | -DG-KPAVEV | [100] |
| Orshsp70-15 | QAAANPERTI | YDAKRLIGRQ | FSDAEVQRDM | KLLPFAVVDR | -NG-KPHVRV | [100] |
| Orshsp70-16 | QAAANPERTI | YDAKRLIGRQ | FSDAEVQRDM | KLLPFAVVDR | -NG-KPHVRV | [100] |
| Orshsp70-14 | QAAANPGRTV | YDAKRLIGRR | FADAEVQRDM | RLLPFAVVDR | -GG-KPHVRV | [100] |
| Orshsp70-13 | QAAALNPDRTI | FDIKRLIGRR | FDDEEVQRDV | KYLPYKVVDK | -GG-KPYVEV | [100] |
| Orshsp70-12 | QAAVNPERTI | FDVKRLIGRK | FEDKEVQRDM | KLVPYKIVNK | -DG-KPYIQV | [100] |
| Cmhsp70-4 | QLALNPERTI | FDVKRLIGRR | FDEETVQKDI | KLLPYKVVNK | -DG-KPYIRV | [100] |
| Orshsp70-2 | QVAMNPINTV | FDAKRLIGRR | FSDTSVQSDA | KLWPFKVLPG | -PGDKPMIGV | [100] |
| Tphsp70-5 | QATINPENTV | FDVKRLIGRN | FSDKSVQADK | KLVPYKIVSN | -EN-KPMVEV | [100] |
| Olhsp70-5 | QAAINPKNTL | FNIKRIIGRQ | YSE--CAHEL | ELMPFDVKEG | -EGGKPIVSV | [100] |
| Pfhsp70-3 | QAITNPENTV | YATKRFIGRK | YDEDATKKEQ | KNLPYKIVRA | SNGD-AWIEA | [100] |
| Pyhsp70-1 | EATLHPTQTV | FDVKRLIGRK | FDDKEVAKDR | TLLPYEIVNN | -EG-KPNIKV | [100] |
| ScSSB1 | QAAALNPRNTV | FDAKRLIGRR | FDDESVQKDM | KTWPFKVIDV | -DG-NPVIEV | [100] |
| ScSSB2 | QAAALNPRNTV | FDAKRLIGRR | FDDESVQKDM | KTWPFKVIDV | -DG-NPVIEV | [100] |
| Tphsp70-3 | QVASNPRNTV | YDIKRIIGRS | FTDPVTAEEC | KNFPFEVSEG | GAHGEPKIVV | [100] |
| Othsp70-2 | QAAVNPKNLTL | FNIKRIIGRQ | YSE--CADDI | ALMPFDVKEG | -EGGKPVISV | [100] |
| Othsp70-4 | QTAMNPNTV | FDAKRLIGRK | FSEPQVQADI | KDWSFKVEAG | -EHDKPMIAV | [100] |
| EcoliDnaK | QAVTNPQNTL | FAIKRLIGRR | FQDEEVQRDV | SIMPFKIIAA | DNGD-AWVEV | [100] |
| Orshsp70-9 | QAVTNPQNTF | FGTKRLIGRR | FEDPQTQKEM | KMVPYKIVKA | PNGD-AWVET | [100] |
| Orshsp70-11 | QAVTNAQNTV | RGSKRLIGRT | FDDPQTQKEM | KMVPYKIVRG | PNGD-AWVEM | [100] |
| Orshsp70-10 | QAVTNPQNTF | FGTKRLIGRR | FDDPQTQKEM | KMVPYKIVKA | LNGD-AWLET | [100] |
| Athsp70-10 | QAAVNPERTV | FDVKRLIGRK | FEDKEVQKDR | KLVPYQIVNK | -DG-KPYIQV | [100] |
| Athsp70-9 | QAVTNPTNTV | SGTKRLIGRK | FDDPQTQKEM | KMVPYKIVRA | PNGD-AWVEA | [100] |
| Orshsp70-4 | QVAMNPINTV | FDAKRLIGRR | FSDPSVQSDM | KLWPFKVIPG | -PGDKPMIVV | [100] |
| Crhsp70-2 | QAVTNPTNTV | YATKRLIGRG | YDDPQTQKEA | KMVPYKIVKA | KNGD-AWVEA | [100] |
| Olhsp70-2 | QAVTNPTNTL | YATKRLIGRT | FEDDEHTQKEA | KLVPYEIVKA | SNGD-AWVAA | [100] |
| Othsp70-3 | QAVTNPTNTL | YATKRLIGRT | FEDDEHTQKEA | KLVPYEIICA | PNGD-AWVSA | [100] |
| Tphsp70-2 | QAVTNPENTF | YAVKRLIGRS | FSDKEVKDIO | GLVPYNIVKS | DNNDDAWVEA | [100] |
| Cmhsp70-2 | QAVTNPENTI | FAAKRLIGRR | YEDPEVQRDV | KIMPYKIVRA | DNGD-AWVEA | [100] |
| ScECM10 | QSVINSENTL | FATKRLIGRR | FEDAEOQRDI | NQVPFKIVKH | SNGD-AWVEA | [100] |
| ScSSC1 | QAVVNPENTL | FATKRLIGRR | FEDAEOQRDI | KQVPYKIVKH | SNGD-AWVEA | [100] |
| Orshsp70-8 | QAVVNPENTF | FSVKRFIGRK | MNE--VDEES | KQVSYRVIRD | DNGNVKLDCEP | [100] |
| Orshsp70-7 | QAVVNPENTF | FSVKRFIGRK | MAE--VDDEA | KQVSYHVVRD | DNGNVKLDCEP | [100] |

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| Athsp70-6 | QAVVNPENTF | FSVKRFIGRK | MNE--VDEES | KQVSYRVVVRD | ENNNVKLECP | [100] |
| Athsp70-7 | QAVVNPENTF | FSVKRFIGRR | MNE--VAEES | KQVSYRVIKD | ENGNVKLDCP | [100] |
| Cchsp70-1 | QAVINPSNTF | YSVKRFIGRK | FEE--INEEN | RQVTYQVNKD | PSGNVKIYCP | [100] |
| Cmhs70-1 | QAVINPGNTF | YSVKRFIGRK | FSE--IEQEA | KQVPYPVQAD | GKGNVRIFC | [100] |
| Athsp70-8 | QAVTNPTNTI | FGSKRLIGRR | FDDPQTQKEM | KMVPYKIVKA | PNGD-AWVEA | [100] |
| Crhs70-1 | QAVVNPENTF | FSVKRFIGRR | MSE--VGSES | TQVPYRVIED | -GGNVKIKCP | [100] |
| Gthsp70-1 | QAVMNPENTF | YSVKRFIGRK | KDE--LGDEL | KQSSYNVKT | INSNVKLECP | [100] |
| Guthsp70-1 | QAVINPDNTF | YSVKRFIGRR | SEE--VSEEL | KQVSYIVKTD | SNGNIKLDCP | [100] |
| Olhsp70-1 | QGVVNPENTF | FSVKRFIGRK | MDE--VNSES | KEIPYSVVNS | -AGKVKIECP | [100] |
| Oshsp70-1 | QAVINPENTF | FSVKRFIGSK | ELE--ISADS | KKLPYKVVKD | QNGNIKINCS | [100] |
| Pfhsp70-1 | QVARNPENTV | FDKRLIGRK | FTESSVQSDM | KHWPFTVKSG | -VDEKPMIEV | [100] |
| Phhsp70-1 | QAVINPENTF | YSVKRFIGRK | QNE--ISQEI | RQTSYNVKTS | GSS-IKIACP | [100] |
| Pophsp70-1 | QAVINPENTF | YSVKRFIGRK | QNE--ISQEI | RQTSYNVKTS | GSS-IKIECP | [100] |
| Poyhsp70-1 | QAVINPENTF | YSVKRFIGRK | QNE--ISQEI | RQTSYNVKTS | GSS-IKIACP | [100] |
| Pyhsp70-2 | QVARNPENTV | FDKRLIGRK | FTESSVQSDM | KHWPFTVKSG | -IEEKPMIEV | [100] |
| SyDnaK1 | QSVTNAENTV | YSIKRFIGRR | WDD--TVEER | SRVPYNCVKG | RDDTVSVSIR | [100] |
| SynDnaK2 | QAVMNPENTF | YSVKRFIGRK | FDE--ITNEA | TEVAYSVVKD | GNGNVKLD | [100] |
| SynDnaK3 | QAVLNQNTF | YGVKRFMGR | YTD--LTPES | KRVAYTIRRD | DRDNIKVRCP | [100] |
| Tphsp70-1 | QSVVNAENTF | FSVKRFIGCK | ADE--ISEES | KELPYKVIKD | SNGNIKIKCS | [100] |
| | | | | | | |
| Athsp70-1 | EYKKEFAAEE | ISSMVLKMR | EIAEAYLGVT | IKNAVVTVPA | YFNDSQRQAT | [150] |
| Athsp70-2 | EYKKQFAAEE | ISSMVLKMR | EIAEAF LGTT | VKNAVVTVPA | YFNDSQRQAT | [150] |
| Athsp70-3 | NYKKEFSAEE | ISSMILKMR | EIAEAYLGTT | IKNAVVTVPA | YFNDSQRQAT | [150] |
| Athsp70-4 | NHKKQFSAEE | ISSMVLKMR | EIAEAF LGSP | VKNAVVTVPA | YFNDSQRQAT | [150] |
| Athsp70-5 | SYKKQFSPEE | ISSMVLKMK | EVAEAF LGRT | VKNAVVTVPA | YFNDSQRQAT | [150] |
| Orshsp70-5 | QYKKQFAAEE | ISSMVLKMR | EIAEAYLGTT | IKNAVVTVPA | YFNDSQRQAT | [150] |
| Orshsp70-3 | QYKKQFAAEE | ISSMVLKMR | EIAEAYLGSS | IKNAVVTVPA | YFNDSQRQAT | [150] |
| Orshsp70-6 | QYKKQFSAEE | ISSMVLKMR | EIAEAYLGST | VKNAVVTVPA | YFNDSQRQAT | [150] |
| Orshsp70-1 | TYKKKFSAAE | ISSMVLTKMK | EIAEAF LSTT | IKNAVITVPA | YFNDSQRQAT | [150] |
| Crhs70-3 | SYKKVFKAAE | ISSMVLKMK | ETAQAF LGAD | VKKAVVTVPA | YFNDSQRQAT | [150] |
| Olhsp70-4 | EFHKKFSAAE | ISSMVLKMK | EVAEAYLGKD | IKNAVVTVPA | YFNDSQRQAT | [150] |
| Othsp70-5 | ALGKQFAAEE | ISAQVLRKLC | DDAATFLGDT | VTKAVVTVPA | YFNDSQRQAT | [150] |
| Tphsp70-4 | EYKKQFKAEE | ISSMVLTKMK | EIAEAYLGKE | VKNAVVTVPA | YFNDSQRQAT | [150] |
| Pfhsp70-2 | QIKTTFAPEQ | ISAMVLEKMK | EIAQSFLGKP | VKNAVVTVPA | YFNDAQRQAT | [150] |
| SCSCSSA1 | EFKKNFTPEQ | ISSMVLGKMK | ETAESYLGAK | VNDAVVTVPA | YFNDSQRQAT | [150] |
| SCSCSSA2 | EFKKNFTPEQ | ISSMVLGKMK | ETAESYLGAK | VNDAVVTVPA | YFNDSQRQAT | [150] |
| SCSCSSA3 | EYKKTFTPEE | ISSMVLKMK | ETAENYLGTT | VNDAVVTVPA | YFNDSQRQAT | [150] |
| SCSCSSA4 | EYKKTFTPEE | ISSMILTKMK | ETAENFLGTE | VKDAVVTVPA | YFNDSQRQAT | [150] |
| Cmhs70-3 | VAHKRFSPPEE | ISAMVLTKMK | DIAESYLGTK | VTDAVITVPA | YFNDSQRQAT | [150] |
| Pyhsp70-3 | Q-GKKYSPSQ | IGACVLEKMK | ETAENYLGK | VHQA VITVPA | YFNDSQRQAT | [150] |
| Athsp70-11 | KIKKVFSPEE | ISAMILTKMK | ETA EAYLGK | IKDAVVTVPA | YFNDAQRQAT | [150] |
| Athsp70-12 | KVKKLFSPPEE | ISAMILTKMK | ETA EAF LGK | IKDAVITVPA | YFNDAQRQAT | [150] |
| Athsp70-13 | NYKKQFAAEE | ISSMVLKMR | EIAEAYLGSS | IKNAVVTVPA | YFNDSQRQAT | [150] |
| Crhs70-4 | DVKKVFSPEE | ISAMILQKMK | DTAEAYLGKT | VKHAVVTVPA | YFNDAQRQAT | [150] |
| Crhs70-5 | DVKKVFSPEE | ISAMILQKMK | DTAEAYLGKT | VKHAVVTVPA | YFNDAQRQAT | [150] |
| Olhsp70-3 | ELKKVFQAAE | ISAMVLTKMK | ETA EAYLGKD | IKHAVVTVPA | YFNDAQRQAT | [150] |
| Othsp70-1 | ELKKIFQAAE | ISAMVLTKMK | ETA EAYLGKD | IKNAVVTVPA | YFNDAQRQAT | [150] |
| SCKAR2 | SVKKVFTPEE | ISGMILGKMK | QIAEDYLGTK | VTHAVVTVPA | YFNDAQRQAT | [150] |

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| Orshsp70-15 | EVKRVFSPEE | VSAMVLTRMK | ETAAYLGEK | VTRAVVTVPA | YFNDAQRQAT | [150] |
| Orshsp70-16 | EVKRVFSPEE | VSAMVLTRMK | ETAAYLGEK | VTRAVVTVPA | YFNDAQRQAT | [150] |
| Orshsp70-14 | EVRRLLSPEE | VSAMVLARMK | ETAAYLGEE | VTRAVVTVPA | YFNDAQRQAT | [150] |
| Orshsp70-13 | RVKKVFSPEE | ISAMILAKMK | ETAESYLQOR | VTDAVVTVPA | YFNDAQRQAT | [150] |
| Orshsp70-12 | KIKKVFSPEE | VSAMILGKMK | ETAAYLGKK | INDAVVTVPA | YFNDAQRQAT | [150] |
| Cmhsp70-4 | EVRKTFSPPEE | ISAMILGKMK | KIAEDYLGKP | VKNAVVTVPA | YFNDAQRQAT | [150] |
| Orshsp70-2 | QYKKQFSAEE | ISSMVLNKMK | ETAAYLGST | VKNAVVTVPA | YFNDSQRQAT | [150] |
| Tphsp70-5 | DIEQRFAPPEE | VSAMILQKMK | STAETFLGKE | IKNAVVTVPA | YFNDAQRQAT | [150] |
| Olhsp70-5 | DVNKDFAPEQ | ISAMVLQKMK | ATAEAQLGVP | ITKAVVTVPA | YFNDAQRRQT | [150] |
| Pfhsp70-3 | Q-GKKYSPSQ | IGACVLEKMK | ETAENYLGRK | VHQAVITVPA | YFNDSQRQAT | [150] |
| Pyhsp70-1 | QIKTTFAPEQ | ISAMVLEKMK | EIAQSFLGKP | VKNAVVTVPA | YFNDAQRQAT | [150] |
| SCSCSSB1 | QYLKTFSPQE | ISAMVLTKMK | EIAEAKIGKK | VEKAVITVPA | YFNDAQRQAT | [150] |
| SCSCSSB2 | QYLKTFSPQE | ISAMVLTKMK | EIAEAKIGKK | VEKAVITVPA | YFNDAQRQAT | [150] |
| Tphsp70-3 | EWKELRPEE | ISAMVLAELK | LAAERHLGRE | VKGAVITVPA | HFNNQQRQAT | [150] |
| Othsp70-2 | EVGKEFAPEQ | ISAMVLQKMK | ATAEAQLGVP | ITKAVVTVPA | YFNDAQRRQT | [150] |
| Othsp70-4 | DFHKKFSAEE | ISSMVLVKMK | ETAAYLGKE | IKNAVVTVPA | YFNDSQRQAT | [150] |
| EcolidNaK | K-GQKMAPPQ | ISAEVLKMK | KTAEDYLGEP | VTEAVITVPA | YFNDAQRQAT | [150] |
| Orshsp70-9 | TDGKQYSPSQ | IGAFVLTKMK | ETAESYLGKT | VSKAVITVPA | YFNDAQRQAT | [150] |
| Orshsp70-11 | G-GQYSPSQ | IGAFVLTKMK | ETAEAFLGKT | VSKAVITVPA | YFNDAQRQAT | [150] |
| Orshsp70-10 | TDGKQYSPSQ | IGAFVLTKMK | ETAESYLGKS | VSKAVITVPA | YFNDAQRQAT | [150] |
| Athsp70-10 | KIKKVFSPEE | ISAMILTKMK | ETAAYLGKK | IKDAVVTVPA | YFNDAQRQAT | [150] |
| Athsp70-9 | N-GQYSPSQ | IGAFILTKMK | ETAAYLGKS | VTKAVVTVPA | YFNDAQRQAT | [150] |
| Orshsp70-4 | QYKKQFSAEE | ISSMVLKMR | EIAEAYLGSN | IKNAVVTVPA | YFNDSQRQAT | [150] |
| Crhsp70-2 | A-GQYSPSQ | MGAFVLTKMK | ETAAYLGHP | VSKAVITVPA | YFNDSQRQAT | [150] |
| Olhsp70-2 | G-GKQYSPSQ | VGAFVLQKMK | ETAAYLGHG | VSQAVVTVPA | YFNDAQRQAT | [150] |
| Othsp70-3 | G-GKQYSPSQ | VGAFVLQKMK | ETAAYLGSN | VSQAVITVPA | YFNDAQRQAT | [150] |
| Tphsp70-2 | R-GKKFSPSQ | IGSMVLGKMK | ETAEGFLGRD | VTKAVVTVPA | YFNDSQRQAT | [150] |
| Cmhsp70-2 | Q-GNRYSPAQ | IGAFVLQKMK | ETAESFLGRT | VNNAVITVPA | YFNDAQRQAT | [150] |
| SCECM10 | R-NRTYSPAQ | IGGFILNKMK | ETAAYLAKS | VKNAVVTVPA | YFNDAQRQAT | [150] |
| SSC1 | R-GQYSPAQ | IGGFVLNKMK | ETAAYLGKP | VKNAVVTVPA | YFNDSQRQAT | [150] |
| Orshsp70-8 | AIGKQFAAEE | ISAQVLRKLV | DDASKFLNDK | VTKAVITVPA | YFNDSQRTAT | [150] |
| Orshsp70-7 | AIGKQFAAEE | ISAQVLRKLV | DDASKFLNDK | ITKAVVTVPA | YFNDSQRTAT | [150] |
| Athsp70-6 | AINKQFAAEE | ISAQVLRKLV | DDASRFLNDK | VTKAVITVPA | YFNDSQRTAT | [150] |
| Athsp70-7 | AIGKQFAAEE | ISAQVLRKLV | DDASRFLNDK | VTKAVITVPA | YFNDSQRTAT | [150] |
| Cchsp70-1 | FKNKDFTPEE | ISAQVIRKLT | EGASKYLGEK | ITKAVITVPA | YFNDSQRQAT | [150] |
| Cmhsp70-1 | AKDKFFAPEE | ISAQVLRKLV | DSASOYLGEK | VTQAVITVPA | YFNDSQRQAT | [150] |
| Athsp70-8 | N-GQKFSPSQ | IGANVLTKMK | ETAAYLGKS | INKAVVTVPA | YFNDAQRQAT | [150] |
| Crhsp70-1 | NAGKDFAPEE | ISAQVLRKLT | EDAAKFLNDK | VEKAVITVPA | YFNDSQRQAT | [150] |
| Gthsp70-1 | ALSKDFAPEE | ISAQVLRKLV | EDASTYLGQQ | VTQAVITVPA | YFNDSQRQAT | [150] |
| Guthsp70-1 | SLKKEFASEE | ISAEVLRKLV | DDASKYLGES | VKQAVITVPA | YFNDSQRQAT | [150] |
| Olhsp70-1 | ALGKQFAAEE | ISAQVLRKLC | DDAASFLGDA | VTKAVVTVPA | YFNDSQRQAT | [150] |
| Oshsp70-1 | SLNKEFSPEE | ISAQVLRKLI | NDATSYLQOD | VTQAVITVPA | YFNDSQRQAT | [150] |
| Pfhsp70-1 | TYQKLFHPEE | ISSMVLQKMK | ENAEFLGKS | IKNAVITVPA | YFNDSQRQAT | [150] |
| Phhsp70-1 | ALDKDFAPEE | ISAQVLRKLV | EDASTYLGET | VTQAVITVPA | YFNDSQRQAT | [150] |
| Pophsp70-1 | ALNKDFAPEE | ISAQVLRKLV | EDASTYLGET | VTQAVITVPA | YFNDSQRQAT | [150] |
| Poyhsp70-1 | ALNKDFAPEE | ISAQVLRKLV | EDASTYLGET | VTQAVITVPA | YFNDSQRQAT | [150] |
| Pyhsp70-2 | VYQKLFHPEE | ISSMVLQKMK | ENAEFLGKS | IKNAVITVPA | YFNDSQRQAT | [150] |
| SyDnaK1 | G--QSYTPQE | ISAMILQKMK | ADSEAFLEGP | VTQAVITVPA | YFTDAQRQAT | [150] |

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| SynDnaK2 | AQGKQFAPEE | ISAQVLRKLV | DDASKYLGET | VTQAVITVPA | YFNDSQRQAT | [150] |
| SynDnaK3 | RLKKDFAPEE | ISAMILRKLA | EEASRYLGEK | VTGAVITVPA | YFNDSQRQAT | [150] |
| Tphsp70-1 | SLNKDFSPEE | ISAQVIRKLI | ADAKEYLGQD | VTKAVITVPA | YFNDSQRQAT | [150] |
| | | | | | | |
| Athsp70-1 | KDAGVIAGLN | VMRIINEPTA | AAIAYGLDKK | EKNVLIFDLG | GGTFDVSLLT | [200] |
| Athsp70-2 | KDAGVIAGLN | VLRIINEPTA | AAIAYGLDKK | EKNVLIFDLG | GGTFDVSLLT | [200] |
| Athsp70-3 | KDAGVIAGLN | VMRIINEPTA | AAIAYGLDKK | EKNVLIFDLG | GGTFDVSLLT | [200] |
| Athsp70-4 | KDAGVISGLN | VMRIINEPTA | AAIAYGLDKK | EKNVLIFDLG | GGTFDVSLLT | [200] |
| Athsp70-5 | KDAGAISGLN | VLRIINEPTA | AAIAYGLDKK | EKNVLIFDLG | GGTFDVSLLT | [200] |
| Orshsp70-5 | KDAGVIAGLN | VMRIINEPTA | AAIAYGLDKK | EKNVLIFDLG | GGTFDVSLLT | [200] |
| Orshsp70-3 | KDAGVIAGLN | VMRIINEPTA | AAIAYGLDKK | EKNVLIFDLG | GGTFDVSLLT | [200] |
| Orshsp70-6 | KDAGVIAGLN | VMRIINEPTA | AAIAYGLDKK | EKNVLIFDLG | GGTFDVSLLT | [200] |
| Orshsp70-1 | KDAGVISGLN | VMRIINEPTA | AAIAYGLDKK | EKNVLIFDLG | GGTFDVSIILT | [200] |
| Crhsp70-3 | KDAGMIAGLE | VLRIINEPTA | AAIAYGLDKK | ERNVLIFDLG | GGTFDVSLLT | [200] |
| Olhsp70-4 | KDAAVISGLN | CLRIINEPTA | AAIAYGLDKR | EKNVLIFDLG | GGTFDVSLLT | [200] |
| Othsp70-5 | KDAGQIAGIE | VLRIINEPTA | ASLAYGFDRK | NETILIFDLG | GGTFDVSILE | [200] |
| Tphsp70-4 | KDAGAISGLN | VLRIINEPTA | AAIAYGLDQK | EKNVLIFDLG | GGTFDVSLLT | [200] |
| Pfhsp70-2 | KDAGTIAGLN | IVRIINEPTA | AALAYGLDKK | -TSILVYDLG | GGTFDVSILV | [200] |
| SCSSA1 | KDAGTIAGLN | VLRIINEPTA | AAIAYGLDKK | EH-VLIFDLG | GGTFDVSLLS | [200] |
| SCSSA2 | KDAGTIAGLN | VLRIINEPTA | AAIAYGLDKK | EH-VLIFDLG | GGTFDVSLLS | [200] |
| SCSSA3 | KDAGTIAGMN | VLRIINEPTA | AAIAYGLDKK | EHNVLIFDLG | GGTFDVSLLS | [200] |
| SCSSA4 | KDAGTIAGLN | VLRIINEPTA | AAIAYGLDKK | EHNVLIFDLG | GGTFDVSLLS | [200] |
| Cmhsp70-3 | KDAGTIAGLN | VLRIINEPTA | AAIAYGIDKK | ERNVLIYDLG | GGTFDVSLLS | [200] |
| Pyhsp70-3 | KDAGKIAGLD | VLRIINEPTA | AALAFGLEKS | GKVIAYVDLG | GGTFDVSILE | [200] |
| Athsp70-11 | KDAGVIAGLN | VARIINEPTA | AAIAYGLDKK | EKNILVFDLG | GGTFDVSILT | [200] |
| Athsp70-12 | KDAGAIAGLN | VVRIINEPTG | AAIAYGLDKK | ESNILVYDLG | GGTFDVSILT | [200] |
| Athsp70-13 | KDAGVIAGLN | VLRIINEPTA | AAIAYGLDKK | IKNVLIFDLG | GGTFDVSLLT | [200] |
| Crhsp70-4 | KDAGTISGLN | VVRIINEPTA | AAIAYGLDKK | EKNILVFDLG | GGTFDVSILT | [200] |
| Crhsp70-5 | KDAGTISGLN | VVRIINEPTA | AAIAYGLDKK | EKNILVFDLG | GGTFDVSILT | [200] |
| Olhsp70-3 | KDAGVIAGLN | VARIINEPTA | AAIAYGLDKK | EKNILVFDLG | GGTFDVSILT | [200] |
| Othsp70-1 | KDAGIIAGLN | VARIINEPTA | AAIAYGLDKK | EKNILVFDLG | GGTFDVSILT | [200] |
| ScKAR2 | KDAGTIAGLN | VLRIINEPTA | AAIAYGLDKS | EHQIIVYDLG | GGTFDVSLLS | [200] |
| Orshsp70-15 | KDAGVIAGLT | VDRIINEPTA | AAIAYGIDKK | EKNVLVFDLG | GGTFDVSILA | [200] |
| Orshsp70-16 | KDAGVIAGLT | VDRIINEPTA | AAIAYGIDKK | EKNVLVFDLG | GGTFDVSILA | [200] |
| Orshsp70-14 | KDAATIAGLA | VERILNEPTA | AALAYGVGKE | GKNVLVFDLG | GGTFDVSILA | [200] |
| Orshsp70-13 | KDAGTIAGLN | VPRIINEPTA | AAIAYGLDRK | MTNVLVYDLG | GGTFDVSILS | [200] |
| Orshsp70-12 | KDAGVIAGLN | VARIINEPTA | AAIAYGLDKK | EKNILVFDLG | GGTFDVSILT | [200] |
| Cmhsp70-4 | KDAGTIAGLT | VQRIINEPTA | AAIAYGLDKG | EKNILVFDLG | GGTFDVTLLT | [200] |
| Orshsp70-2 | KDAGVISGLN | VMRIINEPTA | AAIAYGLDKK | EKNVLIFDLG | GGTFDVSLLT | [200] |
| Tphsp70-5 | KDAGTISGMK | VERIINEPTA | AAIAYGMDKT | ESNVLVFDLG | GGTFDVTLLT | [200] |
| Olhsp70-5 | KDAGAIAGLD | VLRIINEPTA | AALAYGLDRR | NQCILVFDLG | GGTFDVSLLN | [200] |
| Pfhsp70-3 | KDAGKIAGLD | VLRIINEPTA | AALAFGLEKS | GKVIAYVDLG | GGTFDISILE | [200] |
| Pyhsp70-1 | KDAGAIAGLN | IVRIINEPTA | AALAYGLDKK | -TSILVYDLG | GGTFDVSILV | [200] |
| ScSSB1 | KDAGAISGLN | VLRIINEPTA | AAIAYGLGAG | -RHVLIFDLG | GGTFDVSLLH | [200] |
| ScSSB2 | KDAGAISGLN | VLRIINEPTA | AAIAYGLGAG | -RHVLIFDLG | GGTFDVSLLH | [200] |
| Tphsp70-3 | KDAGRIAGLD | VKRIINEPTA | AALSYGLHAK | KANVVIFDLG | GGTFDVSILA | [200] |
| Othsp70-2 | KDAGAIAGLD | VLRIINEPTA | AALAYGLDRR | SQCILVFDLG | GGTFDVSLLA | [200] |
| Othsp70-4 | KDAAVIAGLN | CLRIINEPTA | AAIAYGLDKR | EKNVLIFDLG | GGTFDVSLLT | [200] |

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| EcoliDnaK | KDAGRIAGLE | VKRIINEPTA | AALAYGLDKG | NRTIAVYDLG | GGTFDISIIE | [200] |
| Orshsp70-9 | KDAGRIAGLD | VQRIINEPTA | AALSYGTNNK | G-LIAVFDLG | GGTFDVSILE | [200] |
| Orshsp70-11 | KDAGRIAGLE | VMRIINEPTA | AALSYGMNNK | G-LIAVFDLG | GGTFDVSILE | [200] |
| Orshsp70-10 | KDAGRIAGLD | VQRIINEPTA | AALSYGTNNK | G-LIAVFDLG | GGTFDVSILE | [200] |
| Athsp70-10 | KDAGVIAGLN | VARIINEPTA | AAIAYGLDKK | EKNILVFDLG | GGTFDVSILT | [200] |
| Athsp70-9 | KDAGRIAGLD | VERIINEPTA | AALSYGMTNK | G-LIAVFDLG | GGTFDVSILE | [200] |
| Orshsp70-4 | KDAGVIAGLN | VMRIINEPTA | AAIAYGLDKK | EKNVLIFDLG | GGTFDVSLLT | [200] |
| Crhsp70-2 | KDAGKIAGLE | VLRIINEPTA | AALAYGTDKK | G-LIAVYDLG | GGTFDISILE | [200] |
| Olhsp70-2 | KDAGKIAGLD | VLRIINEPTA | AALSYGVDDK | G-LVAVYDLG | GGTFDVSILE | [200] |
| Othsp70-3 | KDAGKIAGLE | VLRIINEPTA | AALSYGVDDK | G-LVAVYDLG | GGTFDVSILE | [200] |
| Tphsp70-2 | KDAGKIAGLD | VLRIINEPTA | AALAYGMDKA | GKTIAVFDLG | GGTFDVSILE | [200] |
| Cmhs70-2 | KDAGRIAGLN | VLRIINEPTA | AALAYGLDKA | GRVAVYDLG | GGTFDVSILE | [200] |
| ScECM10 | KDAGQIIGLN | VLRVNEPTA | AALAYGLDKS | PKVIAVFDLG | GGTFDISILD | [200] |
| ScSSC1 | KDAGQIVGLN | VLRVNEPTA | AALAYGLEKS | SKVAVVFDLG | GGTFDISILD | [200] |
| Orshsp70-8 | KDAGRIAGLE | VLRIINEPTA | ASLAYGFEEK | NETILVFDLG | GGTFDVSILE | [200] |
| Orshsp70-7 | KDAGRIAGLE | VLRIINEPTA | ASLAYGFEEK | NETILVFDLG | GGTFDVSILE | [200] |
| Athsp70-6 | KDAGRIAGLE | VLRIINEPTA | ASLAYGFDRK | NETILVFDLG | GGTFDVSILE | [200] |
| Athsp70-7 | KDAGRIAGLE | VLRIINEPTA | ASLAYGFERK | NETILVFDLG | GGTFDVSILE | [200] |
| Cchsp70-1 | KDAGKIAGLD | VLRIINEPTA | ASLAYGLDKK | NEKILVFDLG | GGTFDVTILE | [200] |
| Cmhs70-1 | KDAGKIAGLD | VLRIINEPTA | ASLAYGLDKK | NEKILVFDLG | GGTFDVSILE | [200] |
| Athsp70-8 | KDAGKIAGLD | VQRIINEPTA | AALSYGMNNK | G-VIAVFDLG | GGTFDVSILE | [200] |
| Crhsp70-1 | KDAGKIAGLE | VLRIINEPTA | ASLAYGFDDK | NETILVFDLG | GGTFDVSILE | [200] |
| Gthsp70-1 | KDAGQIAGLD | VLRIINEPTA | ASLSYGLDKK | NETILVFDLG | GGTFDVSILE | [200] |
| Guthsp70-1 | KDAGRIAGLE | VLRIINEPTA | ASLAYGLDKK | NETILVFDLG | GGTFDVSILE | [200] |
| Olhsp70-1 | KDAGQIAGIE | VLRIINEPTA | ASLAYGFDRK | NETILIFDLG | GGTFDVSILE | [200] |
| Oshsp70-1 | MDAGKIAGVE | VLRIINEPTA | ASLAYGLDKK | NETILVFDLG | GGTFDVSILE | [200] |
| Pfhs70-1 | KDAGTIAGLN | VMRIINEPTA | AAIAYGLHKK | EKNILIFDLG | GGTFDVSLLT | [200] |
| Phhs70-1 | KDAGKIAGLD | VLRIINEPTA | APLSYGLDKQ | NETILVFDLG | GGTFDVSILE | [200] |
| Pophsp70-1 | KDAGKIAGLD | VLRIINEPTA | ASLSYGLDKQ | NETILVFDLG | GGTFDVSILE | [200] |
| Poyhsp70-1 | KDAGKIAGLD | VLRIINEPTA | ASLSYGLDKQ | NETILVFDLG | GGTFDVSILE | [200] |
| Pyhsp70-2 | KDAGTIAGLN | VMRIINEPTA | AAIAYGLHKK | EKNILIFDLG | GGTFDVSLLT | [200] |
| SyDnaK1 | KDAGTIAGLE | VLRIINEPTA | AALAYGLDKQ | EELILVFDLG | GGTFDVSLLQ | [200] |
| SynDnaK2 | KDAGKIAGIE | VLRIINEPTA | ASLAYGLDKK | NETILVFDLG | GGTFDVSILE | [200] |
| SynDnaK3 | RDAGKIAGLE | VLRIINEPTA | ASLAYGLDQ | IQKILVFDLG | GGTFDVSILE | [200] |
| Tphsp70-1 | VDAGKIAGIE | VLRIINEPTA | ASLAYGLDKK | NETILVFDLG | GGTFDVSILE | [200] |

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| Athsp70-1 | IEEIFEVKAT | AGDTHLGGED | FDNRMVNHV | QEFKRKSKKD | ITGNPRALRR | [250] |
| Athsp70-2 | IEEIFEVKAT | AGDTHLGGED | FDNRMVNHV | QEFKRKNKQD | ITGQPRALRR | [250] |
| Athsp70-3 | IEEIFEVKAT | AGDTHLGGED | FDNRMVNHV | QEFKRKNKKD | ISGNPRALRR | [250] |
| Athsp70-4 | IEEIFEVKAT | AGDTHLGGED | FDNRMVNHV | QEFKRKNKKD | ITGNPRALRR | [250] |
| Athsp70-5 | IEEVFEVKAT | AGDTHLGGED | FDNRLVNHV | AEFRRKHKKD | IAGNARALRR | [250] |
| Orshsp70-5 | IEEIFEVKAT | AGDTHLGGED | FDNRMVNHV | QEFKRKNKKD | ITGNPRALRR | [250] |
| Orshsp70-3 | IEEIFEVKAT | AGDTHLGGED | FDNRMVNHV | QEFKRKNKKD | ISGNPRALRR | [250] |
| Orshsp70-6 | IEEIFEVKAT | AGDTHLGGED | FDNRLVNHV | QEFKRKHKKD | ISGNPRALRR | [250] |
| Orshsp70-1 | IEEIFEVKAT | AGDTHLGGED | FDNRMVNHV | QEFKRKHKKD | ITGNPRALRR | [250] |
| Crhsp70-3 | IEEIFEVKAT | AGDTHLGGED | FDERLVNHFA | NEFORKYKKD | LKTSPRALRR | [250] |
| Olhsp70-4 | IEEIFEVKAT | AGDTHLGGED | FDARLLQHF | AEFKRKNKKD | ITGNPKALRR | [250] |
| Othsp70-5 | VGDVFEVLST | SGDTHLGGDD | FDKRVVEWLA | DDFKKAEGID | LKNDKQALQR | [250] |

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| Tphsp70-4 | IEEIFEVKAT | AGDTHLGGED | FDNRMVDYFL | QDFKRRTKKD | MSQNQRSLRR | [250] |
| Pfhsp70-2 | IDNVFEVYAT | AGNTHLGGED | FDQRVMDYFI | KMFKKKNID | LRTDKRAIQK | [250] |
| ScSSA1 | IEDIFEVKAT | AGDTHLGGED | FDNRLVNHFI | QEFKRKNKKD | LSTNQRALRR | [250] |
| ScSSA2 | IEDIFEVKAT | AGDTHLGGED | FDNRLVNHFI | QEFKRKNKKD | LSTNQRALRR | [250] |
| ScSSA3 | IDEVFEVKAT | AGDTHLGGED | FDNRLVNHFLA | TEFKRKTKKD | ISNNQRSLRR | [250] |
| ScSSA4 | IDEVFEVKAT | AGDTHLGGED | FDSRLVNFLA | EEFKRKNKKD | LTTNQSLRR | [250] |
| Cmhsp70-3 | VDSIFEVRAV | SGNSHLGGED | FDSRMVDYFV | KEFKRKYKD | ITGNRRAMRR | [250] |
| Pyhsp70-3 | ILGVFEVKAT | NGNTSLGGED | FDQRILEYFI | NEFKKKENID | LKNDKLALQR | [250] |
| Athsp70-11 | IDNVFEVLST | NGDTHLGGED | FDHRIMEYFI | KLIKKKHQKD | ISKDNKALGK | [250] |
| Athsp70-12 | IDNVFEVLST | SGDTHLGGED | FDHRVMDYFI | KLVKKKYKND | ISKDHKALGK | [250] |
| Athsp70-13 | IEEIFEVKAT | AGDTHLGGED | FDNRMVNHFV | QEFKRKNKKD | ISGDARALRR | [250] |
| Crhsp70-4 | IDNVFEVIST | NGDTHLGGED | FDQRVMEYFI | KLIKKKYKND | ISGDARALQK | [250] |
| Crhsp70-5 | IDNVFEVIST | NGDTHLGGED | FDQRVMEYFI | KLIKKKYKND | ISGDARALQK | [250] |
| Olhsp70-3 | IDNVFEVIST | NGDTHLGGED | FDQRIMEYFM | KLIKRKHGKD | VSGDVKAVQK | [250] |
| Othsp70-1 | IDNVFEVIST | NGDTHLGGED | FDQRIMEYFI | KLIKRKHGKD | ISSDSKAVQK | [250] |
| ScKAR2 | IENVFEVQAT | SGDTHLGGED | FDYKIVRQLI | KAFKKKHGID | VSDNNKALAK | [250] |
| Orshsp70-15 | IDNVFEVLAT | NGDTHLGGED | FDQRLMDHFV | KVIRRKHGRD | ITGDARALGK | [250] |
| Orshsp70-16 | IDNVFEVLAT | NGDTHLGGED | FDQRLMDHFV | KVIRRKHGRD | IAGDARALGK | [250] |
| Orshsp70-14 | IDGVYEVLAT | NGDTHLGGED | FDQRVMEHFV | ELVRRKHGRD | IAGDARALGK | [250] |
| Orshsp70-13 | LDHVFVLAT | SGDTHLGGED | FDRRVMDHFI | RLVKRQHGRD | IGGDGRALGK | [250] |
| Orshsp70-12 | IDNVFEVLAT | NGDTHLGGED | FDQRIMEYFI | KLIKKKYKND | ISKDNRALGK | [250] |
| Cmhsp70-4 | LDDVFEVLAT | NGDTHLGGED | FDQRVMDYLV | KQFKKKNDLD | LRTDKRAMAK | [250] |
| Orshsp70-2 | IEEIFEVKAT | AGDTHLGGED | FDNRMVNHFV | QEFKRKNKKD | ITGNPRALRR | [250] |
| Tphsp70-5 | IDNVFEVLAT | NGDTHLGGED | FDQRVMDYFI | KMMKKKSNVD | ISGDKRALQK | [250] |
| Olhsp70-5 | LQDVFEVLST | AGDTHLGGED | FDTSLAAFAQ | KEIEKERGDI | --GDEKALRK | [250] |
| Pfhsp70-3 | ILSVFEVKAT | NGNTSLGGED | FDQRILEYFI | SEFKKKENID | LKNDKLALQR | [250] |
| Pyhsp70-1 | IDNVFEVYAT | AGNTHLGGED | FDQRVMDYFI | KMFKKKNID | LRSDKRAIQK | [250] |
| ScSSB1 | IAGVYTVKST | SGNTHLGGQD | FDTNLEHFK | AEFKKKTGLD | ISDDARALRR | [250] |
| ScSSB2 | IAGVYTVKST | SGNTHLGGQD | FDTNLEHFK | AEFKKKTGLD | ISDDARALRR | [250] |
| Tphsp70-3 | MDSVFEVKAT | GGDTHLGGED | FDNSVMKWCL | EQI-KAKNDV | LQGNPRAQSR | [250] |
| Othsp70-2 | LQDVFEVLST | AGDTHLGGED | FDTALAAFAQ | KEIEKQKQDI | --GDAKSLRK | [250] |
| Othsp70-4 | IEEIFEVKAT | AGDTHLGGED | FDNRLLOHFI | QEFKRKHKKD | ITGNPKALRR | [250] |
| EcolidNaK | IDETFEVLAT | NGDTHLGGED | FDSRLINYL | EEFKKQDQID | LRNDPLAMQR | [250] |
| Orshsp70-9 | ISNVFEVKAT | NGDTFLGGED | FDNTLLEFLV | SEFKRSEID | LAKDRLALQR | [250] |
| Orshsp70-11 | ISNVFEVKAT | NGDTFLGGED | FDGALLDYL | SEFKKSDNID | LSKDKLALQR | [250] |
| Orshsp70-10 | ISNVFEVKAT | NGDTFLGGED | FDNTLLEFLV | SEFKRTEGID | LSKDKLALQR | [250] |
| Athsp70-10 | IDNVFEVLST | NGDTHLGGED | FDHRVMEYFI | KLIKKKHQKD | ISKDNKALGK | [250] |
| Athsp70-9 | ISNVFEVKAT | NGDTFLGGED | FDNALLDFLV | NEFKTTEGID | LAKDRLALQR | [250] |
| Orshsp70-4 | IEEIFEVKAT | AGDTHLGGED | FDNRMVNHFV | LEFKRKNKKD | ISGNPRALRR | [250] |
| Crhsp70-2 | IMGVFEVKAT | NGDTFLGGED | FDNTILNYLV | GEFKKESGID | LSKDKLAVQR | [250] |
| Olhsp70-2 | ISGVFEVKAT | NGDTFLGGED | FDTVLLDHFV | DNFKKQDQID | LKQDKLAVQR | [250] |
| Othsp70-3 | ISGVFEVKAT | NGDTFLGGED | FDTVLLDYFV | DNFKKQDQID | LKQDKLAVQR | [250] |
| Tphsp70-2 | ISGVFEVKAT | NGNTMLGGED | FDEELLEML | KTFKKDSGID | LSGDNLAMQR | [250] |
| Cmhsp70-2 | ISGVFEVKAT | NGDTHLGGED | FDNVLLNHLV | SEFKKQDQID | LSRDKLALQR | [250] |
| ScECM10 | IDNIFEVKST | NGDTHLGGED | FDIYLLQEI | SHFKKETGID | LSNDRMAVQR | [250] |
| ScSSC1 | IDNVFEVKST | NGDTHLGGED | FDIYLLREIV | SRFKTETGID | LENDRMAIQR | [250] |
| Orshsp70-8 | VGDVFEVLST | SGDTHLGGDD | FDKRVVDWLA | GNFKNDEGID | LLKDKQALQR | [250] |
| Orshsp70-7 | VGDVFEVLST | SGDTHLGGDD | FDKRVVDWLA | SNFKKDEGID | LLKDKQALQR | [250] |

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| Athsp70-6 | VGDVFEVLST | SGDTHLGGDD | FDKRVDWLA | AEFKKDEGID | LLKDKQALQR | [250] |
| Athsp70-7 | VGDVFEVLST | SGDTHLGGDD | FDKRVDWLA | STFKKDEGID | LLKDKQALQR | [250] |
| Cchsp70-1 | IGDIFEVLST | SGDTHLGGDD | FDKKIVDWLV | DEFKKSYNID | LSKDKQALQR | [250] |
| Cmhs70-1 | IGDVFEVLAT | SGDTHLGGDD | FDKKIVDWLI | DNWKRIEGID | LSKDKQALQR | [250] |
| Athsp70-8 | ISSVFEVKAT | NGDTFLGGED | FDNTLLEYLV | NEFKRSDNID | LTKDNLALQR | [250] |
| Crhs70-1 | VGDVFEVLST | SGDTHLGGDD | FDKRIVDFLA | DDFKKSEGID | LRKDRQALQR | [250] |
| Gthsp70-1 | VGDVFEVLST | SGDTHLGGDD | FDRKIVEWLI | HEFSHDEGIN | LGKDRQALQR | [250] |
| Guthsp70-1 | VGDVFEVLST | SGDTHLGGDD | FDDKIVQWLL | KEFETEHSIN | LKSDRQALQR | [250] |
| Olhs70-1 | VGDVFEVLST | SGDTHLGGDD | FDKRIVEWLA | GDFEKSEGID | LMSDKQALQR | [250] |
| Oshsp70-1 | VGDIFEVLAT | AGDTNLGGDD | FDKVLVRWL | KEFEDQEGID | LTQDIQALQR | [250] |
| Pfhs70-1 | IEDIFEVKAT | AGDTHLGGED | FDNRLVNFCV | EDFKRKNRKD | LSKNSRALRR | [250] |
| Phhs70-1 | VGDVFEVLST | SGDTHLGGDD | FDQQIVEWLI | KDFKQNEGID | LAKDRQALQR | [250] |
| Pophsp70-1 | VGDVFEVLST | SGDTHLGGDD | FDQQIVEWLI | KDFKQSEGID | LGKDRQALQR | [250] |
| Poyhs70-1 | VGDVFEVLST | SGDTHLGGDD | FDQQIVEWLI | KDFKQNEGID | LGKDRQALQR | [250] |
| Pyhs70-2 | IEDIFEVKAT | AGDTHLGGED | FDNRLVNFCV | EDFKRKNRKD | LSKNSRALRR | [250] |
| SyDnaK1 | LGNVFEVLST | SGNNHLGGDD | FDNCVVQWMA | ESFKQKENID | LSTDKMAIQR | [250] |
| SynDnaK2 | VGEVFEVLAT | SGDTHLGGDD | FDKKIVDFLA | GEFQKAEGID | LRKDKQALQR | [250] |
| SynDnaK3 | VGDIFEVKAT | SGDTQLGGND | FDRRIVDWLA | EKFLEAEKVD | LRQDRQALQR | [250] |
| Tphsp70-1 | VGDIFEVLST | AGDTNLGGDD | FDKALVRWL | EDFEAKEGTN | LTKDIQALQR | [250] |
| | | | | | | |
| Athsp70-1 | LRTSCERAKR | TLSSAQTTI | EIDSLYEGID | FYSTITRARF | EELNMDLFRK | [300] |
| Athsp70-2 | LRTACERAKR | TLSSAQTTI | EIDSLYGGAD | FYSPITRARF | EEMNMDLFRK | [300] |
| Athsp70-3 | LRTACERAKR | TLSSAQTTI | EIDSLFDGID | FYAPITRARF | EELNIDLFRK | [300] |
| Athsp70-4 | LRTACERAKR | TLSSAQTTI | EIDSLFEGID | FYTTITRARF | EELNMDLFRK | [300] |
| Athsp70-5 | LRTACERAKR | TLSSAQTTI | EIDSLHEGID | FYATISRARF | EEMNMDLFRK | [300] |
| Orshsp70-5 | LRTACERAKR | TLSSAQTTI | EIDSLYEGID | FYSTITRARF | EELNMDLFRK | [300] |
| Orshsp70-3 | LRTACERAKR | TLSSAQTTI | EIDSLYEGID | FYTTITRARF | EELNMDLFRK | [300] |
| Orshsp70-6 | LRTSCERAKR | TLSSAQTTI | EIDSLFEGVD | FYSTITRARF | EELNMDLFRK | [300] |
| Orshsp70-1 | LRTACERAKR | TLSSAQTTI | EIDSLYEGID | FYATITRARF | EELNMDLFRK | [300] |
| Crhs70-3 | LRTACERAKR | TLSSAAQTTI | ELDSLFEVD | FATSITRARF | EELCMDLFRK | [300] |
| Olhs70-4 | LRSACERAKR | TLSSAQTSI | EIDSLFEGVD | FYTSITRARF | EELCMDLFRK | [300] |
| Othsp70-5 | LTEASEKAKM | ELSSSTSSTI | SLPFITATKH | IDTSLTRTKF | EQLCDDLINR | [300] |
| Tphsp70-4 | LRTACERAKR | TLSSSTQAH | EIDSLFDGVD | FNSTITRARF | EDLCMDYFKK | [300] |
| Pfhs70-2 | LRKEVEIAKR | NLSVVHSTQI | EIEDIVEGHN | FSETLTRAKF | EELNDDLFRK | [300] |
| ScSSA1 | LRTACERAKR | TLSSSAQTSV | EIDSLFEGID | FYTSITRARF | EELCADLFRS | [300] |
| ScSSA2 | LRTACERAKR | TLSSSAQTSV | EIDSLFEGID | FYTSITRARF | EELCADLFRS | [300] |
| ScSSA3 | LRTAAERAKR | ALSSSSQTSI | EIDSLFEGMD | FYTSITRARF | EELCADLFRS | [300] |
| ScSSA4 | LRTAAERAKR | TLSSSAQTSI | EIDSLFEGID | FYTSITRARF | EELCADLFRS | [300] |
| Cmhs70-3 | LRTACERAKR | TLSSATQATI | EIDSLYNGID | FYSSITRAKF | EELCGDLFRS | [300] |
| Pyhs70-3 | LREAAETAKI | ELSSKTQTEV | NLPFITANKH | LQIKLTRAKL | EELCHDLLKG | [300] |
| Athsp70-11 | LRRECERAKR | ALSSQHQRV | EIESLFDGVD | LSEPLTRARF | EELNNDLFRK | [300] |
| Athsp70-12 | LRRECELAKR | SLSNQHQVRV | EIESLFDGVD | FSEPLTRARF | EELNMDLFRK | [300] |
| Athsp70-13 | LRTACERAKR | TLSSAQTTV | EVDSLFEVD | FYSTITRAKF | EEMNMDLFRK | [300] |
| Crhs70-4 | LRREAERAKR | ALSSQHQRV | EIEALYEGID | LSEPLTRARF | EELNMDLFRK | [300] |
| Crhs70-5 | LRREAERAKR | ALSSQHQRV | EIEALYEGID | LSEPLTRARF | EELNMDLFRK | [300] |
| Olhs70-3 | LRREAERAKR | TLSNQHQVRV | EIEALFDGID | FSEPLTRARF | EELNNDLFRK | [300] |
| Othsp70-1 | LRREAERAKR | TLSNQHQVRV | EIEALFDGMD | FSEPLTRARF | EELNNDLFRK | [300] |
| ScKAR2 | LKREAEKAKR | ALSSQMSTRI | EIDSFVDGID | LSETLTRAKF | EELNLDLFRK | [300] |

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| Orshsp70-15 | LRRECERAKR | ALSNQHQVRV | EVESLFDGVD | LSEPLSRARF | EELNSDLFKK | [300] |
| Orshsp70-16 | LRRECERAKR | ALSNQHQVRV | EIESLFDGVD | FSEPLSRARF | EELNGDLFKK | [300] |
| Orshsp70-14 | LRRECERAKR | ALSIQHQVRV | EVESLFDGVD | LSEPLSRARF | EELNNDLFRK | [300] |
| Orshsp70-13 | LRRECERAKR | ALSRQHQVRV | EIEALFVGVD | FSETLTRAKF | EELNMDLFRK | [300] |
| Orshsp70-12 | LRREAERAKR | ALSNQHQVRV | EIESLFDGTD | FSEPLTRARF | EELNNDLFRK | [300] |
| Cmhsp70-4 | LRREVEKAKR | ALSYQTQVRI | EIESIMDGKD | LIEELTRARF | ENLNMDLFRK | [300] |
| Orshsp70-2 | LRTACERAKR | TLSSTAQTTI | EIDSLYEGID | FYTTITRARF | EELNMDLFRK | [300] |
| Tphsp70-5 | LRKEVERVKR | ALSSQQQARL | EIEDLAEGFD | FSETLTRARF | EELNNDLFRK | [300] |
| Olhsp70-5 | LRTACEKAKR | ELS--VANHA | NIECFIGEIE | INMKITREQF | EKVCEPTQR | [300] |
| Pfhsp70-3 | LREAAETAKI | ELSSKTQTEI | NLPFITANKH | LQIKLTRAKL | EELCHDLLKG | [300] |
| Pyhsp70-1 | LRKEVEIAKR | NLSVVHSTQI | EIEDIEGHN | FSETLTRAKF | EELNDDLFRK | [300] |
| ScSSB1 | LRTAAERAKR | TLSSVTQTTV | EVDSLFDGED | FESSLTRARF | EDLNAALFKS | [300] |
| ScSSB2 | LRTAAERAKR | TLSSVTQTTV | EVDSLFDGED | FESSLTRARF | EDLNAALFKS | [300] |
| Tphsp70-3 | LRAVENAKR | TLSSSMSTEI | EVDSLVDGFD | FTVTLDRAKF | EELNAVLFRK | [300] |
| Othsp70-2 | LRTACEKAKR | ELS--VANHA | NIECFIGEHE | INLKVSREEF | NKVNEPTQR | [300] |
| Othsp70-4 | LRTACERAKR | TLSSTAQTSV | EIDSLFEGVD | FYTSITRARF | EELCMDLFRK | [300] |
| EcolidNaK | LKEAAEKAKI | ELSSAQQTDV | NLPYITADKH | MNIKVTRAKL | ESLVEDLVNR | [300] |
| Orshsp70-9 | LREAAEKAKI | ELSSTAQTEI | NLPFITADKH | LNITLTRSKF | ESLVNSLIER | [300] |
| Orshsp70-11 | LREAAEKAKV | ELSSTMQTEI | NLPFITADKH | FNITLTRSKF | ESLVQSLIER | [300] |
| Orshsp70-10 | LREAAEKAKI | ELSSTAQTEI | NLPFITADKH | LNITLTRSKF | ESLVNSLIER | [300] |
| Athsp70-10 | LRRECERAKR | ALSSQHQVRV | EIESLFDGVD | FSEPLTRARF | EELNNDLFRK | [300] |
| Athsp70-9 | LREAAEKAKI | ELSSTSQTEI | NLPFITADKH | FNITLTRSRF | ETLVNHLIER | [300] |
| Orshsp70-4 | LRTACERAKR | TLSSTAQTTI | EIDSLYEGID | FYSTITRARF | EELNMDLFRK | [300] |
| Crhsp70-2 | LREASEKAKC | ELSSTTSTDI | NLPFITADKH | LNMQLTRAKL | ELLVKELLER | [300] |
| Olhsp70-2 | LREAAEKAKI | ELSSAQSTDI | NLPFITADKH | MAMTLRRAKL | EELVGSLLER | [300] |
| Othsp70-3 | LREAAEKAKI | ELSSAASTDI | NLPFITADKH | MALQLTRAKL | EELVGGLLER | [300] |
| Tphsp70-2 | LREAAEKAKR | ELDGLAQTDV | SLPFITADKH | LNKITKAQF | ENMVSELVQK | [300] |
| Cmhsp70-2 | LREAAEKAKV | ELSSTMQTEI | NLPFITADKH | MNMKLTRAKF | ESLVDHLVQR | [300] |
| ScECM10 | IREAAEKAKI | ELSSTLSTEI | NLPFITADKH | IRMPFSRVQL | ENITAPLIDR | [300] |
| ScSSC1 | IREAAEKAKI | ELSSTVSTEI | NLPFITADKH | INMKFSRAQF | ETLTAPLVKR | [300] |
| Orshsp70-8 | LTEAAEKAKM | ELSSLTQTNI | SLPFITATKH | IETTLTRAKF | EELCSDLLDR | [300] |
| Orshsp70-7 | LTEAAEKAKM | ELSTLSQTNI | SLPFITATKH | IETTLRRAKF | EELCSDLIDR | [300] |
| Athsp70-6 | LTEAAEKAKI | ELSSLTQTNM | SLPFITATKH | IETTLTRAKF | EELCSDLLDR | [300] |
| Athsp70-7 | LTEAAEKAKI | ELSSLTQTNM | SLPFITATKH | IETTLTRGKF | EELCSDLLDR | [300] |
| Cchsp70-1 | LTEAAEKAKI | ELSSVSQTEI | NLPFITATIH | FDKSLNRAKF | EELVSELIAR | [300] |
| Cmhsp70-1 | LTEAAEKAKI | ELSNVTQTDI | NLPFITATKH | LDQTLTRAQF | EQLTSDLIER | [300] |
| Athsp70-8 | LREAAEKAKI | ELSSTTQTEI | NLPFITADKH | LNITLTRSKF | EGLVGKLIER | [300] |
| Crhsp70-1 | LTEAAEKAKI | ELSGMAQTSI | NLPFITATKH | IDTQLTRAKF | EEMCNDLLER | [300] |
| Gthsp70-1 | LTEAAEKAKM | ELSSLAQTDI | NLPFITSTKH | LEKNITRAKF | EYLCQDLINR | [300] |
| Guthsp70-1 | LTEASEKAKI | ELSNLSQTEI | NLPFLTATKH | LERSITRAKF | EELCSDLINR | [300] |
| Olhsp70-1 | LTEAAEKAKM | ELSTTSSTSI | SLPFITATKH | IDTSLTRPKF | EQLCDDLINR | [300] |
| Oshsp70-1 | LTEAAEKAKM | ELSTVEKTTI | HLPFITADKH | IEKELTRKTF | ETLCQELIER | [300] |
| Pfhsp70-1 | LRTQCERAKR | TLSSSTQATI | EIDSLFEGID | YSVTVSRARF | EELCIDYFRD | [300] |
| Phhsp70-1 | LTEAAEKAKI | ELSNLTQTEI | NLPFITATKH | LEKTVTRGKF | EELCSNLIDK | [300] |
| Pophsp70-1 | LTEASEKAKI | ELSNLTQTEI | NLPFITATKH | LEKTVTRAKF | EELCSRLIDK | [300] |
| Poyhsp70-1 | LTEAAEKAKI | ELSNLTQTEI | NLPFITATKH | LEKTVTRGKF | EELCSNLIDK | [300] |
| Pyhsp70-2 | LRTQCERAKR | TLSSSTQATI | EIDSLFEGID | YSVTVSRARF | EELCIDYFRD | [300] |
| SyDnaK1 | LREAAEKAKI | ELSSMLNTTI | NLPFITADKH | LEMELARSQF | EELTKQLLED | [300] |

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| SynDnaK2 | LTEAAEKAKI | ELSGVSQTEI | NLPFITATKH | LDTTLSRAKF | EEICSDLIDR | [300] |
| SynDnaK3 | LTEAAEKAKI | ELSGVGTTEI | NLPFITATKH | LETQLSRSEF | EDLCGLVTR | [300] |
| Tphsp70-1 | LTEAAEKAKM | ELSNVEKTTI | NLPFITADKH | IQQELTREKF | ESLCQDLINR | [300] |
| Athsp70-1 | CMEPVEKCLR | DAKMDKSTVH | DVVLVGGSTR | IPKVQQLLQD | FFNKELCKSI | [350] |
| Athsp70-2 | CMEPVEKCLR | DAKMDKSTVH | EIVLVGGSTR | IPKVQQLLQD | FFNKELCKSI | [350] |
| Athsp70-3 | CMEPVEKCLR | DAKMDKNSID | DVVLVGGSTR | IPKVQQLLVD | FFNKELCKSI | [350] |
| Athsp70-4 | CMEPVEKCLR | DAKMDKSSVH | DVVLVGGSTR | IPKVQQLLQD | FFNKELCKSI | [350] |
| Athsp70-5 | CMDPVEKVLK | DAKLDKSSVH | DVVLVGGSTR | IPKIQQLLQD | FFNKELCKSI | [350] |
| Orshsp70-5 | CMEPVEKCLR | DAKMDKSSVH | DVVLVGGSTR | IPRVQQLLQD | FFNKELCKNI | [350] |
| Orshsp70-3 | CMEPVEKCLR | DAKMDKSSVH | DVVLVGGSTR | IPKVQQLLQD | FFNKELCKSI | [350] |
| Orshsp70-6 | CMEPVEKCLR | DAKMDKSTVH | DVVLVGGSTR | IPRVQQLLQD | FFNKELCKSI | [350] |
| Orshsp70-1 | CMEPVEKCLR | DAKMDKAQIH | DVVLVGGSTR | IPKVQQLLQD | FFNKELCKSI | [350] |
| Crhsp70-3 | CMDPVEKCLR | DAKMDKMTVH | DVVLVGGSTR | IPKVQQLLQD | FFNKELNKSI | [350] |
| Olhsp70-4 | CMDPVEKTLR | DAKMDKSQVH | EVVLVGGSTR | IPKVQQLLSD | FFNKDLCKSI | [350] |
| Othsp70-5 | CKVPVEQALK | DAKLSLSDVD | EVILVGGSTR | IPAVRELVKK | LTSKDPNMSV | [350] |
| Tphsp70-4 | CMDPCEKVLK | DAKIAKNQVD | EVVLVGGSTR | IPKIQSMLAE | FFNKEPNKGI | [350] |
| Pfhsp70-2 | TLEPVKKVLD | DAKYEKSKID | EIVLVGGSTR | IPKIQQIIKE | FFNKEPNRGI | [350] |
| ScSSA1 | TLDPVEKVLK | DAKLDKSQVD | EIVLVGGSTR | IPKVQKLVTD | YFNKEPNRSI | [350] |
| ScSSA2 | TLDPVEKVLK | DAKLDKSQVD | EIVLVGGSTR | IPKVQKLVTD | YFNKEPNRSI | [350] |
| ScSSA3 | TLEPVKVLK | DSKLDKSQID | EIVLVGGSTR | IPKIQKLVSD | FFNKEPNRSI | [350] |
| ScSSA4 | TLEPVKVLK | DSKLDKSQID | EIVLVGGSTR | IPKVQKLVSD | FFNKEPNRSI | [350] |
| Cmhsp70-3 | TLDPVERVLK | DANLSKSQVD | DVVLVGGSTR | IPKIQQLLSQ | FFNKELCKSI | [350] |
| Pyhsp70-3 | TIEPCEKCIK | DANIKKDEIN | EIILVGMTR | MPKVSDTVKE | IFQNSPSKSV | [350] |
| Athsp70-11 | TMGPVKKAMD | DAGLQKSQID | EIVLVGGSTR | IPKVQQLLKD | FFEKEPNKGV | [350] |
| Athsp70-12 | TMEPVKKALK | DAGLKKSDID | EIVLVGGSTR | IPKVQQLLKD | FFDKEPSKGT | [350] |
| Athsp70-13 | CMEPVMKCLR | DSKMDKSMVH | DVVLVGGSTR | IPKVQQLLQD | FFNKELCKSI | [350] |
| Crhsp70-4 | TMGPVKKAMD | DANLKKTEID | EIVLVGGSTR | IPKVQDLLRE | WFGKEPNKGV | [350] |
| Crhsp70-5 | TMGPVKKAMD | DANLKKTEID | EIVLVGGSTR | IPKVQDLLRE | WFDKEPNKGV | [350] |
| Olhsp70-3 | TMGPVKKAMD | DAGMKKSEID | EIVLVGGSTR | IPKVQDLLRD | FFDKEPNRGV | [350] |
| Othsp70-1 | TMGPVKKAMD | DAGMKKSEID | EIVLVGGSTR | IPKVQDLLRD | FFDKEPNKGV | [350] |
| ScKAR2 | TLKPVEKVLQ | DSGLEKKDVD | DIVLVGGSTR | IPKVQQLLES | YFDKKASKGI | [350] |
| Orshsp70-15 | TMVPVRKAMA | DARLSKGDID | EIVLVGGSTR | IPKVQQLLKD | YFGKEPNRGV | [350] |
| Orshsp70-16 | TMVPVRKAMA | DAGLGKGDID | EIVLVGGSTR | IPKVQQLLKD | YFGKEPNRGV | [350] |
| Orshsp70-14 | TMAPVRKAMA | DARLSNADID | EIVLVGGSTR | IPKVRQLLRD | YFGKQPNQGV | [350] |
| Orshsp70-13 | TLGPVRKAIA | DAKLLKSDID | EIVLVGGSTR | IPKVQELLKE | MFDKEPTKGI | [350] |
| Orshsp70-12 | TMGPVKKAMD | DAGLEKSQIH | EIVLVGGSTR | IPKVQQLLRD | YFEKEPNKGV | [350] |
| Cmhsp70-4 | TLKPVEIVLK | DAKKEKID | EIVLVGGSTR | IPKIQELITE | FFDKQPSKGI | [350] |
| Orshsp70-2 | CMEPVEKCLR | DAKMDKSTVH | DVVLVGGSTR | IPRVQQLLQD | FFNKELCKSI | [350] |
| Tphsp70-5 | TLGPVGRVLE | DADVSKSEVD | EIVLVGGSTR | IPKVQSLISE | FFGKEPSKGI | [350] |
| Olhsp70-5 | CLDSVKRVLS | DAGKKKEEVD | EIVLVGGSTR | VPRVQGILTE | YFDKTLNKSV | [350] |
| Pfhsp70-3 | TIEPCEKCIK | DADVKKEEIN | EIILVGMTR | MPKVTDTVQK | IFQNNPSKGV | [350] |
| Pyhsp70-1 | TLEPVKKVLD | DAKYEKSKID | EIVLVGGSTR | IPKIQQIIKD | FFNKEPNRGI | [350] |
| ScSSB1 | TLEPVQVLK | DAKISKSQID | EVVLVGGSTR | IPKVQKLLSD | FFDKQLEKSI | [350] |
| ScSSB2 | TLEPVQVLK | DAKISKSQID | EVVLVGGSTR | IPKVQKLLSD | FFDKQLEKSI | [350] |
| Tphsp70-3 | CIDTVNEVLN | DAGCSQDEV | DLVLVGGSTR | IPSLQTSLYD | MFGIELCKSV | [350] |
| Othsp70-2 | CMDAVKRVLS | DASRKKEEVN | EIVLVGGSTR | VPRVQEILTE | YFDKPLNKSV | [350] |
| Othsp70-4 | CMDPVEKCLR | DSKMDKSSVH | EVVLVGGSTR | IPKVQQLLSD | FFNKELCKSI | [350] |

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| EcoliDnaK | SIEPLKVALQ | DAGLSVSDID | DVILVGGQTR | MPMVQKKVAE | FFGKEPRKDV | [350] |
| Orshsp70-9 | TREPCKNCLK | DAGITTKEDV | EVLLVGGMTR | VPKVQEIIVSE | IFGKSPSKGV | [350] |
| Orshsp70-11 | TRIPCVNCLK | DAGVSAKDID | EVLLVGGMTR | VPKVQDIVSQ | IFNKTPSKGV | [350] |
| Orshsp70-10 | TRDPCKSCLK | DAGITTKDVD | EVLLVGGMTR | VPKVQEVVSE | IFGKAPSKGV | [350] |
| Athsp70-10 | TMGPVKKAMD | DAGLQKSQID | EIVLVGGSTR | IPKVQQLLKD | FFEKEPNKGV | [350] |
| Athsp70-9 | TRDPCKNCLK | DAGISAKEVD | EVLLVGGMTR | VPKVQSIVAE | IFGKSPSKGV | [350] |
| Orshsp70-4 | CMEPVKCLR | DAKMDKSSVH | DVLLVGGSTR | IPKVQQLLQD | FFNKELCKSI | [350] |
| Crhsp70-2 | TKQPCLQAMK | DAGVQPKDIQ | EVLLVGGMTR | MPKVNEIVKE | VFQRDPSKGV | [350] |
| Olhsp70-2 | TKQPCKNCLK | DAGVSTGEIS | EVLLVGGMSR | MPKVQGIKVD | LFGRDPSKGV | [350] |
| Othsp70-3 | TKQPCKNCLK | DAGVSTSEIS | EVLLVGGMSR | MPKVQGIKVD | LFGREPSKGV | [350] |
| Tphsp70-2 | TVDPCKQCMK | DADVSKAEIH | EVILVGGMTR | MPKVQETVEN | FFGKKPSRGV | [350] |
| Cmhs70-2 | TLEPMKLCLK | DAGMSAKDIS | DVLLVGGMTR | VPAVQRLVQD | FFGRAPNKS | [350] |
| ScECM10 | TVDPVKKALK | DARITASDIS | DVLLVGGMSR | MPKVADTVKK | LFGKDASKAV | [350] |
| SSSC1 | TVDPVKKALK | DAGLSTSDIS | EVLLVGGMSR | MPKVVEIVKS | LFGKDPSKAV | [350] |
| Orshsp70-8 | L RTPVDNALR | DAKLSFKDID | EVILVGGSTR | IPAVQDLVKK | MTGKDPNVT | [350] |
| Orshsp70-7 | LKTPVTNALR | DAKLSVDNLD | EVILVGGSTR | IPSVQELVKK | ITGKDPNVT | [350] |
| Athsp70-6 | VRTPVENSLR | DAKLSFKDID | EVILVGGSTR | IPAVQELVRK | VTGKEPNVT | [350] |
| Athsp70-7 | VRTPVENSLR | DAKLSFKDID | EVILVGGSTR | IPAVQDLVRK | LTGKEPNVSV | [350] |
| Cchsp70-1 | CKIPVENALK | DAKLNKSDIN | EIVLVGGSTR | IPAIQNLVKE | SLQKDPNQTV | [350] |
| Cmhs70-1 | CRKPVEQALT | DAKLSKQDID | EVVLVGGSTR | IPAVQQLVKD | LLGKQPNQSV | [350] |
| Athsp70-8 | TRSPCQCNCLK | DAGVTIKEYD | EVLLVGGMTR | VPKVQEIIVSE | IFGKSPCKGV | [350] |
| Crhsp70-1 | CKVPVQOALR | DAKLSISDIQ | EVILVGGSTR | IPAVQEIIVRK | LSGKDPNVT | [350] |
| Gthsp70-1 | CEIPVNNALK | DAQLSSGNID | EIVLVGGSTR | IPAIQQLVKK | MIGKDPNQSV | [350] |
| Guthsp70-1 | VKIPVENALK | DAKLDSSKID | EVVLVGGSTR | IPAIQELVKR | ILNKTPNQTV | [350] |
| Olhsp70-1 | CKVPVQOALK | DAKLSLAEVD | EVILVGGSTR | IPAIQELVKS | LTKKEPNMSV | [350] |
| Oshsp70-1 | CQIPVEKALT | DARLEKSDIN | EVVLVGGSTR | IPAIQNLVES | LTNKKPNQSV | [350] |
| Pfhs70-1 | TLIPVEKVLK | DAMMDKKSVDH | EVVLVGGSTR | IPKIQTLIKE | FFNKEACRSI | [350] |
| Phhs70-1 | CSIPVNNALK | DAKLEASSID | EVVLVGGSTR | IPAIQQMVKR | LIGKDPNQSV | [350] |
| Pophsp70-1 | CSIPVNNALK | DAKLEASSID | EVVLVGGSTR | IPAIQQMVKR | LIGKDPNQSV | [350] |
| Poyhsp70-1 | CSIPVNNALK | DAKLEASSID | EVVLVGGSTR | IPAIQQMVKR | LIGKDPNQSV | [350] |
| Pyhsp70-2 | TLIPVEKVLK | DAMMDKKSVDH | EVVLVGGSTR | IPKIQTLIKE | FFNKEACRSI | [350] |
| SyDnaK1 | TRVPLTQALD | DGEIRASDVH | RVILVGGSTR | IPAIQRVIQE | FFPSQLERSV | [350] |
| SynDnaK2 | CGIPVENAIR | DAKIDKSALD | EIVLVGGSTR | IPAVQEVVKK | ILGKDPNQGV | [350] |
| SynDnaK3 | LQRPVKRVLK | DAGLSPVQID | EVVLVGGSTR | MPMVKGLVRS | FIDREPNEV | [350] |
| Tphsp70-1 | CRIPVEKALK | DAKLDQSGIN | EVVLVGGSTR | IPAIQQLVES | LTGKKPNKSV | [350] |

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| Athsp70-1 | NPDEAVAYGA | AVQGAILSGD | LLLLDVTPLS | LGLETAGGVM | TTLIPRNTTI | [400] |
| Athsp70-2 | NPDEAVAYGA | AVQAAILSGD | LLLLDVTPLS | LGLETAGGVM | TTLIQRNTTI | [400] |
| Athsp70-3 | NPDEAVAYGA | AVQAAILSGD | LLLLDVTPLS | LGLETAGGVM | TVLIQRNTTI | [400] |
| Athsp70-4 | NPDEAVAYGA | AVQAAILSGD | LLLLDVTPLS | LGLETAGGVM | TVLIPRNTTI | [400] |
| Athsp70-5 | NPDEAVAYGA | AVQAAILTGD | LLLLDVAPLS | LGLETAGGVM | TVLIPRNTTV | [400] |
| Orshsp70-5 | NPDEAVAYGA | AVQAAILSGD | LLLLDVTPLS | LGLETAGGVM | TVLIPRNTTI | [400] |
| Orshsp70-3 | NPDEAVAYGA | AVQAAILSGD | LLLLDVTPLS | LGLETAGGVM | TVLIPRNTTI | [400] |
| Orshsp70-6 | NPDEAVAYGA | AVQAAILSGD | LLLLDVTPLS | LGLETAGGVM | TVLIPRNTTI | [400] |
| Orshsp70-1 | NPDEAVAYGA | AVQAAILSGD | LLLLDVTPLS | LGLETAGGVM | TVLIPRNTTI | [400] |
| Crhsp70-3 | NPDEAVAYGA | AVQAAILTGD | LLLLDVTPLS | LGLETAGGVM | TVLIPRNTTI | [400] |
| Olhsp70-4 | NPDEAVAYGA | AVQAAILSGD | LLLLDVSPLS | MGLETVGGVM | TVLIPRNTTI | [400] |
| Othsp70-5 | NPDEVVALGA | AVQAGVLAGD | IVLLDVTPLS | LGLETGGVM | TKLIPRNTTL | [400] |

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| Tphsp70-4 | NPDEAVAYGA | TVQAAILSGE | LLLLDVTPLS | LGLETAGGVM | TTLIKRNTTV | [400] |
| Pfhsp70-2 | NPDEAVAYGA | AIQAGIILGD | VLLDVTPLT | LGIETVGGIM | TQLIKRNTVI | [400] |
| ScSSA1 | NPDEAVAYGA | AVQAAILTGD | LLLLDVAPLS | LGIETAGGVM | TKLIPRNSTI | [400] |
| ScSSA2 | NPDEAVAYGA | AVQAAILTGD | LLLLDVAPLS | LGIETAGGVM | TKLIPRNSTI | [400] |
| ScSSA3 | NPDEAVAYGA | AVQAAILTGD | LLLLDVAPLS | LGIETAGGIM | TKLIPRNSTI | [400] |
| ScSSA4 | NPDEAVAYGA | AVQAAILTGD | LLLLDVAPLS | LGIETAGGIM | TKLIPRNSTI | [400] |
| Cmhsp70-3 | NPDEAVAYGA | AVQAAILSGD | ILLLDVTPLS | LGIETAGGVM | TVLIPRNSTI | [400] |
| Pyhsp70-3 | NPDEAVALGA | AIQGGVLKGD | LLLLDVIPLS | LGIETLGGVF | TKLINRNNTTI | [400] |
| Athsp70-11 | NPDEAVAYGA | AVQGGILSGD | ILLLDVAPLT | LGIETVGGVM | TKLIPRNNTVI | [400] |
| Athsp70-12 | NPDEAVAYGA | AVQGGVLSGD | ILLLDVAPLS | LGIETVGGVM | TNIIPRNNTVI | [400] |
| Athsp70-13 | NPDEAVAYGA | AVQAAILSGD | LLLLDVTPLS | LGIETIGGVM | TTLIQRNTTI | [400] |
| Crhsp70-4 | NPDEAVAYGA | AVQGAILSGG | LIVIDRTPLS | LGIETTGGVM | TNLIPRNSVI | [400] |
| Crhsp70-5 | NPDEAVAYGA | AVQGGILGGD | ILLLDVAPLS | LGIETVGGVM | TKLIPRNNTVI | [400] |
| Olhsp70-3 | NPDEAVAYGA | AVQGGILSGD | ILLLDVAPLT | QGIETVGGVM | TKLIPRNNTVI | [400] |
| Othsp70-1 | NPDEAVAYGA | AVQGGILSGD | ILLLDVAPLT | QGIETVGGVM | TKLIPRNNTVI | [400] |
| ScKAR2 | NPDEAVAYGA | AVQAGVLSGD | IVLLDVNALT | LGIETTGGVM | TPLIKRNTAI | [400] |
| Orshsp70-15 | NPDEAVAYGA | AVQASIIISGS | MILLDVAPLT | LGLETAGGVM | AKLIPRNNTV | [400] |
| Orshsp70-16 | NPDEAVAYGA | AVQASIIISGS | MILLDVAPLT | LGLETAGGVM | TKLIPRNNTV | [400] |
| Orshsp70-14 | NPDEAVAYGA | AIQANIVGGD | MVLLDVTPLT | LGLETAGGVM | ATLIPRNTPV | [400] |
| Orshsp70-13 | NPDEAVAYGA | AVQGSIIISGD | ILLLDVTPLT | LGIETAGGVM | TKLIPRNTRI | [400] |
| Orshsp70-12 | NPDEAVAYGA | AVQGSILSGD | ILLLDVAPLT | LGIETVGGVM | TKLIPRNNTVI | [400] |
| Cmhsp70-4 | NPDEAVAYGA | AVQGAILSGD | ILLLDVTPLS | LGIETVGGVM | TKIINRGTTI | [400] |
| Orshsp70-2 | NPDEAVAYGA | AVQAAILTGD | LLLLDVTPLS | QGLETAGGVM | TVLIPRNNTTI | [400] |
| Tphsp70-5 | NPDEAVAYGA | AVQGGILSGE | ILLLDVTPLS | QGIETVGGVM | TKLINRGTTI | [400] |
| Olhsp70-5 | HPDEAVAYGA | AVQGAILAGR | VLLMDVVPLS | LGVECEGRQF | AKVVQRNTAI | [400] |
| Pfhsp70-3 | NPDEAVALGA | AIQGGVLKGD | LLLLDVIPLS | LGIETLGGVF | TKLINRNNTTI | [400] |
| Pyhsp70-1 | NPDEAVAYGA | AIQAGIILGD | VLLDVTPLT | LGIETVGGIM | TQLIKRNTVI | [400] |
| ScSSB1 | NPDEAVAYGA | AVQGAILTGD | LLLLDVAPLS | LGVGMQGMF | GIVVPRNTTV | [400] |
| ScSSB2 | NPDEAVAYGA | AVQGAILTGD | LLLLDVAPLS | LGVGMQGDIF | GIVVPRNTTV | [400] |
| Tphsp70-3 | HPDEAVAHGA | AVQGHILATD | LLLLDVTPLS | LGIELEGKQM | STLIKRNTAI | [400] |
| Othsp70-2 | HPDEAVAYGA | AVQGAILAGR | VLLMDVVPLS | LGVECEGRQF | AKVVPRNTSI | [400] |
| Othsp70-4 | NPDEAVAYGA | AVQAAILSGD | LLLLDVSPLS | MGLETVGGVM | TVLIPRNNTTI | [400] |
| EcolidNaK | NPDEAVAIGA | AVQGGVLTGD | VLLLDVTPLS | LGIETMGGVM | TTLIAKNTTI | [400] |
| Orshsp70-9 | NPDEAVAMGA | AIQGGILRGE | LLLLDVTPLS | LGIETLGGIF | TRLINRNNTTI | [400] |
| Orshsp70-11 | NPDEAVAMGA | AIQGGILRGE | LLLLDVTPLS | LGIETLGGIF | TRLINRNNTTI | [400] |
| Orshsp70-10 | NPDEAVAMGA | AIQGGILRGD | LLLLDVTPLS | LGIETLGGIF | TRLINRNNTTV | [400] |
| Athsp70-10 | NPDEAVAYGA | AVQGGILSGD | ILLLDVAPLT | LGIETVGGVM | TKLIPRNNTVI | [400] |
| Athsp70-9 | NPDEAVAMGA | ALQGGILRGE | LLLLDVTPLS | LGIETLGGVF | TRLITRNNTTI | [400] |
| Orshsp70-4 | NPDEAVAYGA | AVQAAILSGD | LLLLDVTPLS | LGLETAGGVM | TVLIPRNNTTI | [400] |
| Crhsp70-2 | NPDEVVAMGA | AIQGGVLRGD | ILLLDVTPLS | LGIETLGGVF | TRMINRNNTTI | [400] |
| Olhsp70-2 | NPDEVVAMGA | AIQGGVLRGD | ILLLDVTPLS | LGIETLGGVF | TRLISRNTTI | [400] |
| Othsp70-3 | NPDEVVAMGA | AIQGGVLRGD | ILLLDVTPLS | LGIETLGGVF | TRLISRNTTI | [400] |
| Tphsp70-2 | NPDEVVAMGA | AIQGGVLKGD | ILLLDVTPLS | LGIETLGGVM | TKLIPRNNTTI | [400] |
| Cmhsp70-2 | NPDEVVAMGA | AIQGGVLRGD | ILLLDVTPLS | LGIETLGGVF | TKLIPRNSTI | [400] |
| ScSCECM10 | NPDEAVALGA | AIQA AVLSGD | VLLLDVTPLS | LGIETLGGVF | TKLIPRNSTI | [400] |
| ScSSC1 | NPDEAVAIGA | AVQGAVLSGD | VLLLDVTPLS | LGIETLGGVF | TRLIPRNNTTI | [400] |
| Orshsp70-8 | NPDEVVALGA | AVQAGVLSGD | IVLLDVTPLS | LGLETLGGVM | TKIIPRNNTL | [400] |
| Orshsp70-7 | NPDEVVSLGA | AVQGGVLAGD | VLLLDVTPLS | LGLETLGGVM | TKIIPRNNTL | [400] |

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| Athsp70-6 | NPDEVVALGA | AVQAGVLAGD | IVLLDVTPLS | IGLETLLGGVM | TKIIPRNTTL | [400] |
| Athsp70-7 | NPDEVVALGA | AVQAGVLSGD | IVLLDVTPLS | LGLETLLGGVM | TKIIPRNTTL | [400] |
| Cchsp70-1 | NPDEVVAVGA | AIQAGVLAGD | ILLLDVCPLS | LGVETLLGGVM | TKMIPKNTTI | [400] |
| Cmhs70-1 | NPDEVVAIGA | AIQAGVLAGN | ILLLDVCPLS | LGVETLLGGIM | TKMIPRNTTI | [400] |
| Athsp70-8 | NPDEAVAMGA | AIQGGILRGD | LLLLDVVPLS | LGIETLGAVF | TKLIIPRNTTI | [400] |
| Crhs70-1 | NPDEVVALGA | AVQAGVLAGD | IVLLDVTPLS | LGLETLLGGVM | TKLIIPRNTTL | [400] |
| Gthsp70-1 | NPDEVVAIGA | AVQAGVLAGD | ILLLDVTPLS | LGVETLLGGVM | TKIIDRNTTV | [400] |
| Guthsp70-1 | NPDEVVAIGA | AVQAGVLAGD | ILLLDVTPLS | LGVETLLGGVT | TRIIIPRNTTI | [400] |
| Olhsp70-1 | NPDEVVALGA | AVQAGVLAGD | IVLLDVTPLS | LGLETLLGGVM | TKLIIPRNTTL | [400] |
| Oshsp70-1 | NPDEVVAIGA | AIQAGILAGD | VLLLDVTPLS | LGVETLLGGVM | TKIIARNNTTI | [400] |
| Pfhsp70-1 | NPDEAVAYGA | AVQAAILSGD | LLLLDVCPLS | LGLETAGGVM | TKLIERNNTTI | [400] |
| Phhsp70-1 | NPDEVVAIGA | AVQAGVLAGD | ILLLDVTPLS | LGVETLLGGVM | TKIIPRNTTI | [400] |
| Pophsp70-1 | NPDEVVAIGA | AVQAGVLAGD | ILLLDVTPLS | LGVETLLGGVM | TKIIPRNTTI | [400] |
| Poyhsp70-1 | NPDEVVAIGA | AVQAGVLAGD | ILLLDVTPLS | LGVETLLGGVM | TKIIPRNTTI | [400] |
| Pyhsp70-2 | NPDEAVAYGA | AVQAAILSGD | LLLLDVCPLS | LGLETAGGVM | TKLIERNNTTI | [400] |
| SyDnaK1 | NPDEAVALGA | AIQAGVIGGD | VLLLDVTPLS | LGLETLLGEVT | TKIIERNNTTI | [400] |
| SynDnaK2 | NPDEVVAVGA | AIQGGVLSGD | ILLLDVSPLS | LGVETLLGGVM | TKIIPRNTTI | [400] |
| SynDnaK3 | NPDEVVAIGA | AIQAGILDGD | ILLLDVTPLS | FGLETIGGVM | KKLLPRNTTI | [400] |
| Tphsp70-1 | NPDEVVAIGA | AIQAGILAGD | ILLLDVTPLS | LGVETVGGIM | TKLISRNTTI | [400] |
| | | | | | | |
| Athsp70-1 | PTKKEQVFST | YSDNQPGVLI | QVYEGERART | KDNNLLGKFE | LSGIPPAPRG | [450] |
| Athsp70-2 | PTKKEQVFST | YSDNQPGVLI | QVFEGERART | KDNNLLGKFE | LSGIPPAPRG | [450] |
| Athsp70-3 | PTKKEQVFST | YSDNQPGVLI | QVYEGERART | KDNNLLGKFE | LSGIPPAPRG | [450] |
| Athsp70-4 | PTKKEQIFST | YSDNQPGVLI | QVYEGERART | KDNNLLGKFE | LSGIPPAPRG | [450] |
| Athsp70-5 | PCKKEQVFST | YADNQPGVLI | QVYEGERART | RDNNLLGTFE | LKGIPPAPRG | [450] |
| Orshsp70-5 | PTKKEQVFST | YSDNQPGVLI | QVYEGERTRT | RDNNLLGKFE | LSGIPPAPRG | [450] |
| Orshsp70-3 | PTKKEQVFST | YSDNQPGVLI | QVYEGERART | KDNNLLGKFE | LSGIPPAPRG | [450] |
| Orshsp70-6 | PTKKEQVFST | YSDNQPGVLI | QVYEGERTRT | RDNNLLGKFE | LSGIPPAPRG | [450] |
| Orshsp70-1 | PTKKEQVFST | YSDNQPGVLI | QVYEGERTRT | KDNNLLGKFE | LTGIPPAPRG | [450] |
| Crhs70-3 | PTKKEQVFST | YSDNQPGVLI | QVYEGERART | KDNNLLGKFE | LTGIPPAPRG | [450] |
| Olhsp70-4 | PTKKEQVFST | YSDNQPGVLI | QVFEGERSRT | RDNHLLGKFE | LSGIPPAPRG | [450] |
| Othsp70-5 | PTSKSEVFST | AADGQTSVEI | NVLQGEREFV | KDNKSLGTFR | LDGIPSAP-- | [450] |
| Tphsp70-4 | PAKKTQTFST | YADNQPGVLI | QVFEGERSMT | RDNNLLGKFN | LDGIPPMPRG | [450] |
| Pfhsp70-2 | PTKKSQTFST | YQDNQPAVLI | QVFEGERALT | KDNHLLGKFE | LSGIPPAQRG | [450] |
| ScSSA1 | PTKKSEIFST | YADNQPGVLI | QVFEGERAKT | KDNNLLGKFE | LSGIPPAPRG | [450] |
| ScSSA2 | PTKKSEVFST | YADNQPGVLI | QVFEGERAKT | KDNNLLGKFE | LSGIPPAPRG | [450] |
| ScSSA3 | PTKKSETFST | YADNQPGVLI | QVFEGERTRT | KDNNLLGKFE | LSGIPPAPRG | [450] |
| ScSSA4 | PTKKSEVFST | YADNQPGVLI | QVFEGERTRT | KDNNLLGKFE | LSGIPPAPRG | [450] |
| Cmhs70-3 | PTKKSQIFTT | YADNQPAVTI | QVYEGERAMT | KDNHLLGQFT | LTGIPPAPRG | [450] |
| Pyhsp70-3 | PTKKSQVFST | AADNQTVSI | KVFQGEREMA | CDNKMLGSFD | LVGIPPAPRG | [450] |
| Athsp70-11 | PTKKSQVFTT | YQDQQTTSI | QVFEGERSLT | KDCRLLGKFD | LTGVPPAPRG | [450] |
| Athsp70-12 | PTKKSQVFTT | YQDQQTTSI | QVFEGERSMT | KDNRELGKFD | LTGILPAPRG | [450] |
| Athsp70-13 | PAKKEQEFST | TVDNQPDVLI | QVYEGERART | IDNNILGQFV | LSGIPPAPRG | [450] |
| Crhs70-4 | PTKKSQTFST | AADNQPTVSI | QVYEGERALT | KDNHKLQGF | LNGIPPAPRG | [450] |
| Crhs70-5 | PTKKSQTFST | YQDQQTTSI | QVYEGERAMT | KDNHKLQGF | LNGIPPAPRG | [450] |
| Olhsp70-3 | PTKKSQTFST | YQDNQQTVM | QVFEGERAMT | KDNHLLGKFE | LTSIPPAPRG | [450] |
| Othsp70-1 | PTKKSQTFST | YQDNQQTVM | QVFEGERAMT | KDNHLLGKFE | LTSIPPAPRG | [450] |
| ScKAR2 | PTKKSQIFST | AVDNQPTVM | KVYEGERAMS | KDNNLLGKFE | LTGIPPAPRG | [450] |

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| Orshsp70-15 | PTKKTQVFTT | YKDKQTTVTI | QVFEGERSMT | RDNRLLGKFD | LAGIAPAPRG | [450] |
| Orshsp70-16 | PTKKTQVFTT | YKDRQTTVTI | QVFEGERSMT | RDNRLLGKFD | LTGIAPAPRG | [450] |
| Orshsp70-14 | PTKRAQLFST | YKDKQTTVTV | KVFEGERSMT | RDNRLLGKFD | LAGIAPAPRG | [450] |
| Orshsp70-13 | PVKKSQVFTT | YEDHQTTVSI | KVFEGERSLT | KDCRELGRFD | LSGIAPAPRG | [450] |
| Orshsp70-12 | PTKKSQVFTT | YQDQOTTVSI | QVFEGERSMT | KDCRLLGKFD | LSGIPAAPRG | [450] |
| Cmhsp70-4 | PTKKSQIFST | HVDRQSSVLI | QVYEGERVAT | KDNHLLGKFE | LTGIPPAPRG | [450] |
| Orshsp70-2 | PTKKEQVFST | YSDNQPGVLI | QVYEGERTRT | KDNHLLGKFE | LSGIPPAPRG | [450] |
| Tphsp70-5 | PTKKSQTFST | HQDNQPAVLI | QVFEGERSMT | KDNHLLGKFE | LTGIPPAPRG | [450] |
| Olhsp70-5 | PCKKKSEFTT | VYDNQDEIDV | RIFEGERSNT | DGNHLLGEFQ | ISGIERASAG | [450] |
| Pfhsp70-3 | PTKKSQIFST | AADNQTVQSI | KVFQGEREMA | SDNKLLGSFD | LVGIPPAPRG | [450] |
| Pyhsp70-1 | PTKKSQTFST | YQDNQPAVLI | QVFEGERALT | KDNHLLGKFE | LSGIPPAQRG | [450] |
| ScSSB1 | PTIKRRTFTT | CADNQTTVQF | PVYQGERVNC | KENTLLGEFD | LKNIPMMPAG | [450] |
| ScSSB2 | PTIKRRTFTT | VSDNQTTVQF | PVYQGERVNC | KENTLLGEFD | LKNIPMMPAG | [450] |
| Tphsp70-3 | PCKKTRTYTT | VDDWQTEIDV | VVFEGERPHV | DANNKLGsfv | ISGVQRARAG | [450] |
| Othsp70-2 | PCKKKSEFTT | VYDNQDEIDV | RIFEGEQNT | DGNHLLGEFQ | ISGIERASAG | [450] |
| Othsp70-4 | PTKKEQVFST | YSDNQPGVLI | QVFEGERSRT | RDNHLLGKFE | LSGIPPAPRG | [450] |
| EcoliDnaK | PTKKSQVFST | AEDNQSAVTI | HVLQGERKRA | ADNKSLGQFN | LDGINPAPRG | [450] |
| Orshsp70-9 | PTKKSQVFST | AADNQTVQGI | RVLQGEREMA | TDNKLLGEFD | LVGIPPAPRG | [450] |
| Orshsp70-11 | PTKKSQVFST | AADNQTVQGI | KVLQGEREMA | TDNKLLGEFQ | LEGIPPAPRG | [450] |
| Orshsp70-10 | PTKKSQVFST | AADNQTVQGI | KVLQGEREMA | ADNKLLGEFD | LVGIPPAPRG | [450] |
| Athsp70-10 | PTKKSQVFTT | YQDQOTTVSI | QVFEGERSLT | KDCRLLGKFD | LNGIPPAPRG | [450] |
| Athsp70-9 | PTKKSQVFST | AADNQTVQGI | RVLQGEREMA | TDNKLLGEFD | LVGIPPSPRG | [450] |
| Orshsp70-4 | PTKKEQVFST | YSDNQPGVLI | QVYEGERTRT | KDNHLLGKFE | LSGIPPAPRG | [450] |
| Crhsp70-2 | PTKKSQVFST | AADNQTVQGI | KVFQGEREMA | ADNKLLGQFD | LVGIPPAPRG | [450] |
| Olhsp70-2 | PTKKSQTFST | AADNQTVQGI | KVLQGEREMA | ADNKTLGQFD | LVGIPPAPRG | [450] |
| Othsp70-3 | PTKKSQTFST | AADNQTVQGI | KVLQGEREMA | ADNKTLGQFD | LVGIPPAPRG | [450] |
| Tphsp70-2 | PTKKQOTFST | AVDNQPQVQI | KVMQGEREMA | ADNKNLGEFD | LVGIPSAPRG | [450] |
| Cmhsp70-2 | PTKKSQVFST | AADNQTVQGI | KVLQGERPMA | AENKLLGQFD | LVGIPPAPRG | [450] |
| ScSCECM10 | PNKKSQIFST | AASGQTSVEV | KVFQGERELV | KDNKLIGNFT | LAGIPPAPKG | [450] |
| ScSSC1 | PTKKSQIFST | AAAGQTSVEI | RVFQGERELV | RDNKLIGNFT | LAGIPPAPKG | [450] |
| Orshsp70-8 | PTSKSEVFST | AADGQTSVEI | NVLQGEREFV | RDNKSLGSFR | LDGIPPAPRG | [450] |
| Orshsp70-7 | PTSKSEVFST | AADGQTSVEI | NVLQGEREFV | RDNKSLGSFR | LDGIPPAPRG | [450] |
| Athsp70-6 | PTSKSEVFST | AADGQTSVEI | NVLQGEREFV | RDNKSLGSFR | LDGIPPAPRG | [450] |
| Athsp70-7 | PTSKSEVFST | AADGQTSVEI | NVLQGEREFV | RDNKSIGSFR | LDGIPPAPRG | [450] |
| Cchsp70-1 | PTRKTEIYST | AVDNQTNVEI | HVLQGERELA | KDNKSLGTFR | LDGIPPAPRG | [450] |
| Cmhsp70-1 | PTRKTEIYST | AVDNQTNVEI | HVLQGERELA | KDNKSLGTFR | LDGIPPAPRG | [450] |
| Athsp70-8 | PTKKSQVFST | AADNQMQVGI | KVLQGEREMA | ADNKVLGEFD | LVGIPPAPRG | [450] |
| Crhsp70-1 | PTSKSEVFST | AADGQTSVEI | NVLQGEREFA | RDNKSLGTFR | LDGIPPAPRG | [450] |
| Gthsp70-1 | PTKKSEIFST | AVDNQPNVEI | HVLQGEREFT | KDNKSLGTFR | LDGIMPAPRG | [450] |
| Guthsp70-1 | PTKKSEVFST | AVDNQPNVEI | HVLQGEREFA | KDNKSLGTFR | LDGILPAPRG | [450] |
| Olhsp70-1 | PTSKSEVFST | AADGQTSVEI | NVLQGEREFV | KDNKSLGNFR | LDGIPSAPRG | [450] |
| Oshsp70-1 | PVKKSEMFST | AVENQTNVEI | HVLQGERELV | AGNKSLGNFR | LDGIPAAERG | [450] |
| Pfhsp70-1 | PAKKSQIFST | YADNQPGVLI | QVYEGERALT | KDNHLLGKFE | LDGIPPAPRK | [450] |
| Phhsp70-1 | PTKKSEVFST | AVDNQPNVEI | QVLQGERELT | KDNKSLGTFR | LDGIMPAPRG | [450] |
| Pophsp70-1 | PTKKSEVFST | AVDNQPNVEI | QVLQGERELT | KDNKSLGTFR | LDGIMPAPRG | [450] |
| Poyhsp70-1 | PTKKSEVFST | AVDNQPNVEI | QVLQGERELT | KDNKSLGTFR | LDGIMPAPRG | [450] |
| Pyhsp70-2 | PAKKSQIFST | YADNQPGVLI | QVYEGERALT | KDNHLLGKFE | LDGIPPAPRK | [450] |
| SyDnaK1 | PTSRSEVFST | AVDQTSVEI | HVIQGERAMA | RDNKSLGKFL | LAGIPPAPRG | [450] |

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| SynDnaK2 | PTKKSETFST | AVDGQSNEI | HVLQGEREMA | NDNKSLGTFR | LDGIPPAPRG | [450] |
| SynDnaK3 | PVRKSDIFST | GENNQTVVEV | HVLQGEREMA | SDNISLGRFK | LSGIPPAPRG | [450] |
| Tphsp70-1 | PVKKSELFST | AADNQTNVEI | HVLQGEREVV | SGNKSLGNFK | LEGIPQAPKG | [450] |
| Athsp70-1 | VPQITVCFDI | DANGILNVSA | EDKTTGQKNK | ITITNDKGRL | SKDEIEKMOV | [500] |
| Athsp70-2 | VPQITVCFDI | DANGILNVSA | EDKTTGKKNK | ITITNDKGRL | SKEDIEKMOV | [500] |
| Athsp70-3 | VPQITVCFDI | DANGILNVSA | EDKTTGQKNK | ITITNDKGRL | SKDEIEKMOV | [500] |
| Athsp70-4 | VPQITVCFDI | DANGILNVSA | EDKTTGQKNK | ITITNDKGRL | SKEEIEKMOV | [500] |
| Athsp70-5 | VPQINVCFDI | DANGILNVSA | EDKTAGVKNQ | ITITNDKGRL | SKEEIEKMOV | [500] |
| Orshsp70-5 | VPQITVCFDI | DANGILNVSA | EDKTTGQKNK | ITITNDKGRL | SKEEIEKMOV | [500] |
| Orshsp70-3 | VPQINVCFDI | DANGILNVSA | EDKTTGQKNK | ITITNDKGRL | SKEEIEKMOV | [500] |
| Orshsp70-6 | VPQITVCFDI | DANGILNVSA | EDKTTGQKNK | ITITNDKGRL | SKEEIEKMOV | [500] |
| Orshsp70-1 | VPQINVTFDI | DANGILNVSA | EDKTTGKKNK | ITITNDKGRL | SKEEIERMOV | [500] |
| Crhsp70-3 | VPQINVIFDI | DANGILNVSA | EDKTTGNKNK | ITITNDKGRL | SKDEIERMOV | [500] |
| Olhsp70-4 | VPQINVCFDI | DANGILNVSA | EDKSGSQKNK | ITITNDKGRL | SKEDIERMVQ | [500] |
| Othsp70-5 | -----L | NAR----- | ----- | ---TCSST-V | AHLDVG---- | [500] |
| Tphsp70-4 | QPQIDVIFDM | DANGILNVSA | LEKSTGKENK | ITITNDKGRL | SQEEIERMOV | [500] |
| Pfhs70-2 | VPKIEVTFV | DKNGILHVEA | EDKGTGKSRG | ITITNDKGRL | SKEQIEKMIN | [500] |
| ScSSA1 | VPQIEVTFDV | DSNGILNVSA | VEKGTGKSNK | ITITNDKGRL | SKEDIEKMVA | [500] |
| ScSSA2 | VPQIEVTFDV | DSNGILNVSA | VEKGTGKSNK | ITITNDKGRL | SKEDIEKMVA | [500] |
| ScSSA3 | VPQIDVTFDI | DANGILNVSA | LEKGTGKSNK | ITITNDKGRL | SKDDIDRMVS | [500] |
| ScSSA4 | VPQIEVTFDI | DANGILNVSA | VEKGTGKSNK | ITITNDKGRL | SKEDIDKMVA | [500] |
| Cmhs70-3 | VPQIEVTFDL | DANGILNVTA | VDKTTGKSER | IAIKNEKGR | SEAEVERMVK | [500] |
| Pyhs70-3 | VPQIEVTFDV | DANAIINISA | IDKMTNKKQQ | ITIQSSGG-L | SKEEIEKMOV | [500] |
| Athsp70-11 | TPQIEVTFEV | DANGILNVKA | EDKASGKSEK | ITITNEKGR | SQEEIDRMVK | [500] |
| Athsp70-12 | VPQIEVTFEV | DANGILQVKA | EDKVAKTSQS | ITITNDKGRL | TEEEIEEMIR | [500] |
| Athsp70-13 | IPQFTVCFDI | DSNGILNVSA | EDKATGKKNK | ITITNDKGRL | SKDDIEKMOV | [500] |
| Crhs70-4 | TPQIEVTFEV | DANGILTVSA | QDKGTGKKEK | ITITAEKGR | SQDDIERMVK | [500] |
| Crhs70-5 | TPQIEVTFEV | DANGILNVAA | EDKGTGKKEK | ITITAEKGR | SQDDIERMVK | [500] |
| Olhsp70-3 | VPQIEVTFEI | DANGILNVGA | EDKGTGKSEK | ITITNDKGRL | SQEEIERMVE | [500] |
| Othsp70-1 | VPQIEVTFEI | DANGILNVGA | EDKGTGKSEK | ITITNDKGRL | SQEEIERMVE | [500] |
| SCKAR2 | VPQIEVTFAL | DANGILKVSA | TDKGTGKSES | ITITNDKGRL | TQEEIDRMVE | [500] |
| Orshsp70-15 | APQIEVTFEV | DANGILSVLA | ADKATGRSEK | ITISGDDRKI | SQEEIDRMVR | [500] |
| Orshsp70-16 | APQIAVTFEV | DANGILSVLA | ADKATGRSEK | ITISGDDRKI | SQEEIDRMVR | [500] |
| Orshsp70-14 | APQIEVAFEV | DADGILSVSA | ADRATGRSER | ITISGDDRKT | SREEIDRMLG | [500] |
| Orshsp70-13 | VPQIEVTFEV | DENGILHVTA | SDKAAGRSKS | ITITNDKGRL | SQEEIDRMVR | [500] |
| Orshsp70-12 | TPQIEVTFEV | DANGILNVKA | EDKGTGKSEK | ITITNEKGR | SQEEIDRMVR | [500] |
| Cmhs70-4 | VPQIEVTFEI | DANGILQVSA | EEKTAGKREK | ITIRNDKGRL | KDEEIQRMVR | [500] |
| Orshsp70-2 | VPQITVCFDI | DANGILNVSA | EDKTTGQKNK | ITITNDKGRL | SKEDIEKMOV | [500] |
| Tphsp70-5 | VPQIEVSFEV | DANGILQVSA | EDKGTGKAEK | ITITAEKGR | SEEDIERMVR | [500] |
| Olhsp70-5 | EPKIDVTFEV | NTNGLLTVTA | KDRVTVGEAN | VSLQHDRGR | TAEIEERMCA | [500] |
| Pfhs70-3 | VPQIEVTFDV | DANAIINISA | IDKMTNKKQQ | ITIQSSGG-L | SKEEIEKMOV | [500] |
| Pyhs70-1 | VPKIEVTFV | DKNGILHVEA | EDKGTGKSKG | ITITNDKGRL | SKEQIEKMIN | [500] |
| SCSSB1 | EPVLEAIFEV | DANGILKVTA | VEKSTGKSSN | ITISNAVGR | SSEEIEKMVN | [500] |
| SCSSB2 | EPVLEAIFEV | DANGILKVTA | VEKSTGKSSN | ITISNAVGR | SSEEIEKMVN | [500] |
| Tphsp70-3 | EPKVDVTFAL | DANGILNVSA | RDQVTGAEAR | AEIKAKEGR | TSDDIDKMIE | [500] |
| Othsp70-2 | EPKIDVTFEV | NTNGLLTVTA | KDRVTVGEAN | VSLQHDRGR | TAEIEERMCA | [500] |
| Othsp70-4 | VPQINVCFDI | DANGILNVSA | EDKASGQKNK | ITITNDKGRL | SKEEIERMOV | [500] |

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| EcoliDnaK | MPQIEVTFDI | DADGILHVSA | KDKNSGKEQK | ITIKASSG-L | NEDEIQKMVR | [500] |
| Orshsp70-9 | MPQIEVTFDI | DANGIVTVSA | KDKSTGKEQQ | ITIRSSGG-L | SEAEIQKMVQ | [500] |
| Orshsp70-11 | MPQIEVTFDI | DANGIVKVSA | KDKSTGKEQE | ITIKSSGG-L | SESDIEKMVR | [500] |
| Orshsp70-10 | MPQIEVTFDI | DANGIVTVSA | KDKATGKEQQ | ITIRSSGG-L | SEAEIQKMH | [500] |
| Athsp70-10 | TPQIEVTFEV | DANGILNVKA | EDKASGKSEK | ITITNEKGRL | SQEEIDRMVK | [500] |
| Athsp70-9 | VPQIEVTFDI | DANGIVTVSA | KDKTTGKVQQ | ITIRSSGG-L | SEDDIQKMVR | [500] |
| Orshsp70-4 | VPQITVCFDI | DANGILNVSA | EDKTTGQKNK | ITITNDKGRL | SKEEIEKMVQ | [500] |
| Crhsp70-2 | VPQVEVTFDI | DANGIVHVSA | KDKATGKEQS | VRIQSSGG-L | SDDQINQMVR | [500] |
| Olhsp70-2 | VPQIEVTFDI | DANGIVNVSA | KDKATNKEQK | VTIQSSGG-L | SDADIEQMVR | [500] |
| Othsp70-3 | VPQIEVTFDI | DANGIVNVSA | KDKATGKEQK | VTIQSSGG-L | SDSDIENMVR | [500] |
| Tphsp70-2 | VPQIEVSFDI | DADGILNVSA | KDKGTGKEQN | IIIKSCGG-L | SDDDIERMVR | [500] |
| Cmhs70-2 | VPQIEVIFDI | DANGILHVSA | VDKGTGKRNE | VVITSSGG-L | SNEEIEKMIK | [500] |
| ScECM10 | TPQIEVTFDI | DANGIINVSA | KDLASHKDSS | ITVAGASG-L | SDTEIDRMVN | [500] |
| ScSSC1 | VPQIEVTFDI | DADGIINVSA | RDKATNKDSS | ITVAGSSG-L | SENEIEQMVN | [500] |
| Orshsp70-8 | VPQIEVKFDI | DANGILSVSA | VDKGTGKKQD | ITITGAST-L | PKDEVEKMVE | [500] |
| Orshsp70-7 | VPQIEVKFDI | DANGILSVAA | IDKGTGKKQD | ITITGAST-L | PKDEVERMVE | [500] |
| Athsp70-6 | VPQIEVKFDI | DANGILSVSA | VDKGTGKKQD | ITITGAST-L | PKDEVDQMVO | [500] |
| Athsp70-7 | VPQIEVKFDI | DANGILSVSA | SDKGTGKKQD | ITITGAST-L | PKDEVDTMVQ | [500] |
| Cchsp70-1 | VPQIEVTFDI | DANGILSVTA | KEKTTGKQOS | VTITGAST-L | DKDEIQKIIK | [500] |
| Cmhs70-1 | VPQIEVTFDI | DANGILSVTA | KERSTGKQOS | ITITGAST-L | DQSEIERMVK | [500] |
| Athsp70-8 | MPQIEVTFDI | DANGITTVSA | KDKATGKEQN | ITIRSSGG-L | SDDEINRMVK | [500] |
| Crhsp70-1 | VPQIEVKFDI | DANGILSVTA | TDKGTSKKQD | IRITGAST-L | DKGDVERMVK | [500] |
| Gthsp70-1 | VPQIEVIFDI | DANGILSVKA | KDKGTGKEQS | ITITGAST-L | PKEEVEKLVK | [500] |
| Guthsp70-1 | VPQIEVTFDI | DANGILSVTA | KDKGTGKEQS | ITITGAST-L | PSDEVERMVN | [500] |
| Olhsp70-1 | VPQIEVKFDI | DANGILSVEA | CDKGTGKKQD | IKITGAST-L | SSDEVDRMVA | [500] |
| Oshsp70-1 | VPQIEVTFDI | NVDGLLSVKA | KELETGIEQS | VTIQGASN-L | DESEVSDMLA | [500] |
| Pfhs70-1 | VPQIEVTFDI | DANGILNVTA | VEKSTGKQNH | ITITNDKGRL | SQDEIDRMVN | [500] |
| Phhs70-1 | VPQIEVTFDI | DANGILSVKA | KEKATGKEQS | ITISGAST-L | PKDDVERMVK | [500] |
| Pophsp70-1 | VPQIEVTFDI | DANGILSVKA | KEKATGKEQS | ITISGAST-L | PKDDVERMVK | [500] |
| Poyhsp70-1 | VPQIEVTFDI | DANGILSVKA | KEKATGKEQS | ITISGAST-L | PKDDVERMVK | [500] |
| Pyhsp70-2 | VPQIEVTFDI | DANGILNVTA | VEKSTGKQNH | ITITNDKGRL | SPEEIDRMVN | [500] |
| SyDnaK1 | MPQIEVSFEI | DVNGILKVSA | QDQGTGKEQS | IVISHTGG-L | SGGEIEKMRQ | [500] |
| SynDnaK2 | VPQIEVTFDI | DANGILNVTA | KDRGTGKEQS | ISITGAST-L | PDTEVDRMVK | [500] |
| SynDnaK3 | VPQVQVSFDI | DANGILQVTA | RDKTTGREQS | ITVQGASI-L | SEGEVNRMIQ | [500] |
| Tphsp70-1 | KPQIEVTFDI | NVDGILSVTA | KENESGKEQN | VTIQGASN-L | SESEVNDMLE | [500] |

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| Athsp70-1 | EAEKYKSEDE | EHHKKVEAKN | ALENYAYNMR | NTIQDEK-KL | PAADKKKIED | [550] |
| Athsp70-2 | EAEKYKSEDE | EHHKKVEAKN | ALENYAYNMR | NTIRDEK-KL | PAADKKKVED | [550] |
| Athsp70-3 | EAEKYKSEDE | EHHKKVDAKN | ALENYAYNMR | NTIRDEK-KL | AGDDKKKIED | [550] |
| Athsp70-4 | EAEKYKAEDE | EHHKKVDAKN | ALENYAYNMR | NTIKDEK-KL | DAADKKKIED | [550] |
| Athsp70-5 | DAEKYKAEDE | QVKKKVEAKN | SLENYAYNMR | NTIKDEK-KL | TQEDKQKIEK | [550] |
| Orshsp70-5 | EAEKYKSEDE | EHHKKVESKN | ALENYAYNMR | NTIKDEK-KL | PAADKKKIED | [550] |
| Orshsp70-3 | EAEKYKAEDE | EHHKKVDAKN | ALENYAYNMR | NTIKDEK-KL | AADDKKRIED | [550] |
| Orshsp70-6 | DAEKYKSEDE | EHHKKVDAKN | SLENYAYNMR | NTIQDEK-KL | PADDKKKIED | [550] |
| Orshsp70-1 | EAEKYKAEDE | QVRHKVEARN | ALENYAYNMR | NTVRDEK-KL | PADDKKKIED | [550] |
| Crhsp70-3 | EAEKYKADDE | QLKKKVEAKN | SLENYAYNMR | NTIREDK-QL | SASDKESMEK | [550] |
| Olhsp70-4 | DAEKYKAEDE | EHHKKIEAKN | AVENYAYNMR | NTMNDTN-KL | DADDKKTIED | [550] |
| Othsp70-5 | ----- | ----SAFEPT | SASHMLVQ-- | ----- | ----- | [550] |

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| Tphsp70-4 | EAEQYKAEDD | ANKNRVESKN | GLENYCYSLK | SSIEGEE-KI | PEGDKTKLLD | [550] |
| Pfhsp70-2 | DAEKFADEDK | NLREKVEAKN | NLDNYIQSMK | ATVEDKDKKI | EKEDKNTILS | [550] |
| ScSSA1 | EAEKFKEEDE | KESQRIASKN | QLESIAYSLK | NTISEAG-KL | EQADKDTVTK | [550] |
| ScSSA2 | EAEKFKEEDE | KESQRIASKN | QLESIAYSLK | NTISEAG-KL | EQADKDAVTK | [550] |
| ScSSA3 | EAEKYRADDE | REAERVQAKN | QLESYAFTLK | NTINEAS-KV | GEDDAKRLET | [550] |
| ScSSA4 | EAEKFKAEDE | QEAQRVQAKN | QLESYAFTLK | NSVSENN-KV | GEEDARKLEA | [550] |
| Cmhsp70-3 | EAEAMKAKDE | EVRRTVEARN | SLEQLAYSAL | RTVEEEQ-SL | SAGDKQKILD | [550] |
| Pyhsp70-3 | EAELNREKDQ | HKKNLTDSKN | EAETLIYSSE | KQLDDFKDKI | SDSDKEELKQ | [550] |
| Athsp70-11 | EAEFFAEEDK | KVKEKIDARN | ALETYVYNMK | NQVSDKDKKL | EGDEKEKIEA | [550] |
| Athsp70-12 | EAEFFAEEDK | IMKEKIDARN | KLETYVYNMK | STVADKEKKI | SDEDKEKMEG | [550] |
| Athsp70-13 | EAEKYKSEDE | EHKKKVEAKN | GLENYAYNVG | NTLRD---KL | PAADKKKFED | [550] |
| Crhsp70-4 | EAEFFAEQDK | AVKAKIDARN | QLETYCYNMK | NTVEDK--KI | EEEDKEKITA | [550] |
| Crhsp70-5 | EAEFFAEQDK | AVKAKIDARN | QLETYCYNMK | STVEDK--KI | EEEDKEKITA | [550] |
| Olhsp70-3 | EAEFFAEEDR | KTAKERIDSRN | SLETFAYNMK | NTISDSDKKL | DDDDKNTIEE | [550] |
| Othsp70-1 | EAEFFAEEDR | KTAKERIDSRN | SLETFAYNMK | NTVSDSDKKL | EEDDKSTIEE | [550] |
| ScKAR2 | EAEKFAEDA | SIKAKVESRN | KLENYAHSLK | NQVNGD--KL | EEEDKETLLD | [550] |
| Orshsp70-15 | EAEFFAEEDR | RHREQVDARN | SLEAYVYNIK | N-TLGGK-AM | EGEEKDKVEE | [550] |
| Orshsp70-16 | EAEFFAEDER | RHREQVDARN | SLEAYVYVVK | S-TLGGK-AM | EGEEKEKVEE | [550] |
| Orshsp70-14 | EAEFFAEDER | RHRERAGARN | SLEAYVYGVK | NAVVGGE-AM | DGGEKEKVEA | [550] |
| Orshsp70-13 | EAEFFAEDER | RVRERVDARN | RLENYVYRMR | SAVRDGG-KI | GDDDRERMES | [550] |
| Orshsp70-12 | EAEFFAEEDK | KVKERIDARN | QLETYVYNMK | NTVGDKDKKL | ESEEKEKVEE | [550] |
| Cmhsp70-4 | EAEYYAEVDA | KLKRKVDAKN | NFENYIYQVR | QMYEDKD-KL | STDDIDKDKD | [550] |
| Orshsp70-2 | EAEKYKAEDE | EHKKKVDAKN | SLENYAYNMR | NTIKDDK-KL | PEADKKKIED | [550] |
| Tphsp70-5 | EAEFFAEEDK | KVKERIDARN | GLESYLYNLK | NTLDDDE-NI | SAEDKKELQD | [550] |
| Olhsp70-5 | EAEAMAEEDE | RLARMREYEG | TD----- | ----- | ----- | [550] |
| Pfhsp70-3 | EAELNREKDQ | LKKNLTDSKN | EAETLIYSSE | KQLEDFKDKI | SDSDKDELRO | [550] |
| Pyhsp70-1 | DAEKFADEDK | NLREKVESKN | NLDNYIQSMK | ATVEDKDKKI | EKEDKDTILN | [550] |
| ScSSB1 | QAEEFKAADE | AFAKKHEARQ | RLESYVASIE | QTVTDPV-KL | KRGSKSKIEA | [550] |
| ScSSB2 | QAEEFKAADE | AFAKKHEARQ | RLESYVASIE | QTVTDPV-KL | KRGSKSKIEA | [550] |
| Tphsp70-3 | DAEKYRAQDE | ELTEKTDYKA | SLEALFTVQ | SKVAETN--- | ----KSNEVK | [550] |
| Othsp70-2 | EAEAMAEEDE | RIAKMREYEG | TD----- | ----- | ----- | [550] |
| Othsp70-4 | DAEKFAEDE | EHKKKIDAKN | GLENYAYNMR | NTMSDAN-KL | DAEDKKTIED | [550] |
| EcolidNaK | DAEANAEADR | KFEELVQTRN | QGDHLLHSTR | KQVEEAGDKL | PADDKTAIES | [550] |
| Orshsp70-9 | EAELHSQKDQ | ERKALIDIRN | NADTTIYSVE | KSLGEYRDKI | PAEVATEIET | [550] |
| Orshsp70-11 | EAELHSQKDQ | ERKSLIDLKN | SADTTIYSIE | KSVSEYKDKV | PAEVTNEIQS | [550] |
| Orshsp70-10 | EAELHSQKDQ | ERKALIDIRN | TADTTIYSIE | KSLGEYRDKI | PAEVASEIET | [550] |
| Athsp70-10 | EAEFFAEEDK | KVKEKIDARN | ALETYVYNMK | NQVNDKDKKL | EGDEKEKIEA | [550] |
| Athsp70-9 | EAELHAQKDK | ERKELIDTKN | TADTTIYSIE | KSLGEYREKI | PSEIAKEIED | [550] |
| Orshsp70-4 | EAEKYKAEDE | EHKKKVDAKN | ALENYAYNMR | NTIKDDK-KL | SADDKKKIED | [550] |
| Crhsp70-2 | DAETYAEKDK | TRKELIEAKN | EADTAIYTTE | KSLAEYKSKL | PQAVVDEIQK | [550] |
| Olhsp70-2 | DAESHAESDK | QRKELIEVRN | EADTLVYSAD | KNLSEHGDKL | PQDVKDAITN | [550] |
| Othsp70-3 | DAEAHADADK | KRKEMIEIKN | EADTLIYSAD | KNLSEHGANKL | PQDVKDAITN | [550] |
| Tphsp70-2 | DAEVNADADA | KKKQVIESKN | EIDSLIYSTE | KSVKEHADKL | SEEVKTEVEK | [550] |
| Cmhsp70-2 | DAEMHAEEDR | RRQAAVEAKN | EADSLLYTTE | RTLSEHRAKL | SATDVETVEK | [550] |
| ScECM10 | EAERYKNQDR | ARRNAIETAN | KADQLANDTE | NSIKEFEGKL | DKTDSQRLKD | [550] |
| ScSSC1 | DAEKFKSQDE | ARKQAIETAN | KADQLANDTE | NSLKEFEGKV | DKAEAQKVRD | [550] |
| Orshsp70-8 | EAEKFAEKDK | EKRDAIDTKN | QAESVIYQTE | KQLKELGDKV | PGDVKGKVEA | [550] |
| Orshsp70-7 | EADKFAQEDK | EKRDAIDTKN | QADSVVYQTE | KQLKELGDKV | PAPVKEKVDA | [550] |

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| Athsp70-6 | EAERFAKDDK | EKRDAIDTKN | QADSVVYQTE | KQLKELGEKI | PGEVKEKVEA | [550] |
| Athsp70-7 | EAERFAKEDK | EKRDAIDTKN | QADSVVYQTE | KQLKELGEKI | PGPVKEKVEA | [550] |
| Cchsp70-1 | EAEINAQEDR | KKKENIELKN | QAETICYQAO | KQLNEFKKEKI | DKNQYKRIED | [550] |
| Cmhsp70-1 | EAEKNAEEDR | KKREQIETKN | LAESVYQAE | KMG----- | -----LKD | [550] |
| Athsp70-8 | EAELENAQKDQ | EKKQLIDLKN | SADTTIYSVE | KSLSEYREKI | PAEIASEIET | [550] |
| Crhsp70-1 | EAEKFAGEDK | KRRESVETKN | QAETMVYQTE | KQLKEFEGKV | PADIKAKVEA | [550] |
| Gthsp70-1 | EAEENSELDK | HKREQIDLKN | QADALCYQSQ | NQINELKDKI | SEDEKQNVQK | [550] |
| Guthsp70-1 | EAQNSAKEDK | EKRDKIDLKN | QSDSLCYQSE | KQLKELEGKI | DDTNKNKISS | [550] |
| Olhsp70-1 | DAEKFASEDA | AKREQVEVRN | SADSMVYQTE | KQVQELDEKI | PQDVKEKVLE | [550] |
| Oshsp70-1 | EAEKYAALNK | EKRQNLIDLKN | QAETLCFEAE | KELDLFKTSI | PEEKQQNVQK | [550] |
| Pfhsp70-1 | DAEKYKAEDE | ENRKRIEARN | SLENYCYGVK | SSLEDQK-KL | QPAEIETCMK | [550] |
| Phhsp70-1 | EAEENFDTDQ | KRRKNIDTKN | QAESLCYQAE | KQIKEFEDKI | SQDLKTKIEE | [550] |
| Pophsp70-1 | EAEENFDVDQ | KRRKNIDIRN | QAESLCYQSE | KQVKEFEDKI | DEELKNRITN | [550] |
| Poyhsp70-1 | EAEENFDTDQ | KRRKNIDTKN | QAESLCYQAE | KQVKEFEDKI | SQDLKIKIEE | [550] |
| Pyhsp70-2 | DAEKYKAEDE | ENKKRIEARN | SLENYCYGVK | SSLEDQK-KL | QPNEVETCMK | [550] |
| SyDnaK1 | EAQQYAAQDQ | LRLRMELQN | QADSLFHTYE | TTLQESGELV | REELKSSGKQ | [550] |
| SynDnaK2 | EAESNAAADK | ERREKIDRKN | QADSLVYQAE | KQITELGDKV | PAADKIKAEK | [550] |
| SynDnaK3 | EAETFAAQDR | ERRERIEKRN | SAKALTDQAO | RRLKEVTLAF | TVSYRRQVDA | [550] |
| Tphsp70-1 | EAEKYAVIDK | EQKEKSEMVV | SATAYCDEVE | KKLNSGEMEC | TTEEEEEIKN | [550] |

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| Athsp70-1 | SIEQAIQWLE | GNQLAEAEDEF | EDKMKELESI | CNPII | [585] |
| Athsp70-2 | SIEEAIQWLD | GNQLGEAEDEF | EDKMKELESV | CNPII | [585] |
| Athsp70-3 | SIEAAIEWLE | ANQLAEAEDEF | EDKMKELESI | CNPII | [585] |
| Athsp70-4 | AIDQAIQWLD | GNQLAEAEDEF | EDKMKELESL | CNPII | [585] |
| Athsp70-5 | AIDETIEWIE | GNQLAEVDEF | EYKLKELEGI | CNPII | [585] |
| Orshsp70-5 | AIDQAIQWLD | GNQLAEAEDEF | DDKMKELEGI | CNPII | [585] |
| Orshsp70-3 | AIDGAISWLD | TNQLAEAEDEF | EDKMKELEGI | CNPII | [585] |
| Orshsp70-6 | AVEQAIQWLD | NNQLAEVEEF | EDKMKELEGL | CNPII | [585] |
| Orshsp70-1 | AIEDAIKWLD | GNQLAEAEDEF | EDKMKELESL | CNPII | [585] |
| Crhsp70-3 | ALTAAMDWLE | ANQMAEVEEF | EHHLKELEGV | CNPII | [585] |
| Olhsp70-4 | AVEAAITWLD | GNQTAEVDEF | EDKLKELEGV | CNPII | [585] |
| Othsp70-5 | ----- | ----- | ----- | ----- | [585] |
| Tphsp70-4 | AIAETTAWLD | ANQTAEEKEEF | EEKQKALEAI | AMPIL | [585] |
| Pfhsp70-2 | AVKDAEDWLN | NNSNADSEAL | KQKLDLEAV | CQPII | [585] |
| ScSSA1 | KAETISWLD | SNTTASKEEF | DDKLKELQDI | ANPIM | [585] |
| ScSSA2 | KAETIAWLD | SNTTATKEEF | DDQLKELQEV | ANPIM | [585] |
| ScSSA3 | ASQETIDWLD | ASQAASTDEY | KDRQKELEGI | ANPIM | [585] |
| ScSSA4 | AAQDAINWLD | ASQAASTEY | KERQKELEGV | ANPIM | [585] |
| Cmhsp70-3 | KTKEVLEWLE | ENATASLDQI | KNMQKELESV | TMPIF | [585] |
| Pyhsp70-3 | KISALREKLT | --DD--LDSI | KDATKQLQEK | SWAIS | [585] |
| Athsp70-11 | ATKEALEWLD | ENQNSEKEEY | DEKLKEVEAV | CNPII | [585] |
| Athsp70-12 | VLKEALEWLE | ENVNAEKEDY | DEKLKEVELV | CDPVI | [585] |
| Athsp70-13 | SIEEVIQWLD | DNQLAEAEDEF | EHKMKELESV | WSTII | [585] |
| Crhsp70-4 | AVKEALEWLD | ENPDADTSEY | KDRLKEVEDV | CNPII | [585] |
| Crhsp70-5 | AVKEALEWLD | ENPDAEPDEY | KDKLKEVEDV | CNPII | [585] |
| Olhsp70-3 | AVKETLDWLD | ENQSAEKEDY | DEQLKQLEEV | CNPV | [585] |
| Othsp70-1 | AVKEALDWLD | DNQSAEKDDY | DEQLKKLEEV | CNPV | [585] |
| ScKAR2 | AANDVLEWLD | DNETAIAEDF | DEKFESLSKV | AYPIT | [585] |

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| Orshsp70-15 | AVREAYEWLD | GNPDAGKEEY | EEKLRELEDV | CNPVM | [585] |
| Orshsp70-16 | AVREAHEWLD | GNPDAGKEEY | EEKLRELEDV | CNPVM | [585] |
| Orshsp70-14 | AVMEAYEWLD | GNQDVGKEEY | EEKLRELEDV | CNPVM | [585] |
| Orshsp70-13 | ALTEALEWLE | DNRTAEKEDY | EEKLKEVEQV | CGPII | [585] |
| Orshsp70-12 | ALKEALEWLD | ENQTAEKEEY | EEKLKEVEAV | CNPII | [585] |
| Cmhsp70-4 | SVESAQDWLD | EHEASDAAAI | EERMKAFQDV | VQPII | [585] |
| Orshsp70-2 | AIDGAISWLD | SNQLAEAEFEF | EDKMKELEGV | CNPII | [585] |
| Tphsp70-5 | IVDETLDWME | ENEA-DKEDY | DGKQKEVENI | ANPIM | [585] |
| Olhsp70-5 | ----- | ----- | ----- | ----- | [585] |
| Pfhsp70-3 | KITVLREKLT | --ED--LDSI | KDATKQLQEK | SWAIS | [585] |
| Pyhsp70-1 | AIKEAEDWLN | NNSNADSEAL | KQKLDVEAI | CQPII | [585] |
| ScSSB1 | ALSDALAALQ | IE-DPSADEL | RKAEVGLKRV | VTKAM | [585] |
| ScSSB2 | ALSDALAALQ | IE-DPSADEL | RKAEVGLKRV | VTKAM | [585] |
| Tphsp70-3 | ELADLMDWLE | LDDTATLEDM | KKRGRIVEDT | WGIIV | [585] |
| Othsp70-2 | ----- | ----- | ----- | ----- | [585] |
| Othsp70-4 | AVEAAITWLD | GNQTAEVDEF | EDKLKELEGV | CNPII | [585] |
| EcolidNaK | ALTALETALK | --ED--KAAI | EAKMQELAQV | SQKLM | [585] |
| Orshsp70-9 | AIADLRVMT | --DD--IEKI | KANIEAANKA | VSKIG | [585] |
| Orshsp70-11 | AVSDLRAAMA | --DD--LEKI | KQKLEAANKA | VSKIG | [585] |
| Orshsp70-10 | AIADLRNEMA | --DD--IEKI | KSKIEAANKA | VSKIG | [585] |
| Athsp70-10 | ATKEALEWLD | ENQNSEKEEY | DEKLKEVEAV | CNPII | [585] |
| Athsp70-9 | AVADLRSASS | --DD--LNEI | KAKIEAANKA | VSKIG | [585] |
| Orshsp70-4 | AIDGAINWLD | SNQLAEAEDEF | EDKMKELESI | CNPII | [585] |
| Crhsp70-2 | AITECRAASQ | --ED--LPDL | KAKIQALSTA | SMKIG | [585] |
| Olhsp70-2 | AQAEVRSAAE | --ED--LAKL | REAINGLQQA | VMKIG | [585] |
| Othsp70-3 | AQADVRTASE | --ED--VEKL | REAINALQKA | VMKIG | [585] |
| Tphsp70-2 | AIEEARLVKD | --DD--LDEL | KAKTEALSQA | SMKMG | [585] |
| Cmhsp70-2 | AAQDLRAVLE | --DATAADTI | REKTKVLQQA | AMRIG | [585] |
| ScECM10 | QISSLRELVS | RSDEVNDDDV | GTKIDNLRTS | SMKLF | [585] |
| ScSSC1 | QITSLKELVA | RVEEVNAEEL | KTKTEELQTS | SMKLF | [585] |
| Orshsp70-8 | KLTELKDAVA | --GST--QTM | KDALAALNQE | VMQLG | [585] |
| Orshsp70-7 | KLNELKEAIA | --GST--QSM | KDAMAALNEE | VMQIG | [585] |
| Athsp70-6 | KLQELKDKIG | --GST--QEI | KDAMAALNQE | VMQIG | [585] |
| Athsp70-7 | KLQELKEKIA | --GST--QEI | KDTMAALNQE | VMQIG | [585] |
| Cchsp70-1 | LIAKLKQAIS | --NEY--EEI | KNLMEAIQKE | TMEIG | [585] |
| Cmhsp70-1 | NAQELKNAID | --LDY--EGM | KNLTQQVQTL | IAQKA | [585] |
| Athsp70-8 | AVSDLRTAMA | --ED--VEDI | KAKVEAANKA | VSKIG | [585] |
| Crhsp70-1 | KLGELKAALP | --DDA--EAT | KAAMNALQQE | VMAMG | [585] |
| Gthsp70-1 | LIDSLKLSIQ | --DDY--EKI | KDIQNQLQQV | MMNIG | [585] |
| Guthsp70-1 | MISELRNAIN | --ENY--DEM | RDLNSKLQTA | LMDLG | [585] |
| Olhsp70-1 | KVAELKQAIA | --DDL--EKM | KTAQEDLQQQ | VMAMG | [585] |
| Oshsp70-1 | LIENIRQDTQ | --DNF--ESL | KLIVEELKMA | MKDMV | [585] |
| Pfhsp70-1 | TITILEWLE | KNQLAGKDEY | EAKQKEAESV | CAPIM | [585] |
| Phhsp70-1 | LITELRSSLE | --EEY--ENI | ESISQRLQNS | LMDIG | [585] |
| Pophsp70-1 | LISELRSNLE | --EEL--DSI | EANSEKLQNA | LMEIG | [585] |
| Poyhsp70-1 | LITELRSSLE | --EEY--DNI | ESISQQLQNA | LMDIG | [585] |
| Pyhsp70-2 | SVTSILEWLE | KNQLAGKDEY | EAKQKEAEAV | CSPIM | [585] |
| SyDnaK1 | KKDQLAIALR | --PNTPVEKL | QTLVEEFRQI | ILLIG | [585] |

SynDnaK2 LIKDLKEAVA --EDD--AKI QTVMPPELQQV LYSIG [585]
SynDnaK3 LCSEILDSLE --DDE--RRL DRAQADLQDV LYELN [585]
Tphsp70-1 VIKTLREALS --ANY--ASI KESFEQLRTL TE--- [585]