

## **ПРИЛОЖЕНИЕ**

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«Полиморфизм последовательностей генов *CLE* картофеля»

Аминокислотные последовательности белков CLE картофеля *Solanum bukasovii* (SbCLE), *Solanum verrucosum* (SvCLE), *Solanum commersonii* (ScoCLE), *Solanum chaucha* (SchCLE), *Solanum curtilobum* (ScuCLE), *Solanum juzepczukii* (SjCLE), *Solanum ajanhuiri* (SaCLE), *Solanum phureja* (SphCLE).

>SphCLE1  
MLARTSIVLILMIFVTIQQDVLGGRGYLMEQDNNNINMEDNAQSPVATTRSISHIIGDDEGGFVA  
YVNREVPSSPDPLHNR\*  
>SchCLE1  
MLRTSIVLILMIFVTIQQDVLGGRGYLMEQDNNNINMEDNAQSPVATTRSISHIIGDDEGGFAY  
VNREVPSSPDPLHNR\*  
>SvCLE1  
MLARTSIVLILMIFVTIQQDVLGGRGYLMEQDNNNINMEDNAQSPVATTRSISHIIGDDEGGFVA  
YVNREVPSSPDPLHNR\*  
>SjCLE1  
MLARTSIVLLLMIKVTIQQDVLGGRGYLMEQDSNNINMEDNAQSPVATTRSISHIIGDDEGGFVA  
YVNREVPSSPDPLHNR\*  
>ScuCLE1  
MLARTSIVLILMIFVTIQQDVLGGRGYLMEQDNNNINMEDNAQSPVATTRSISHIIGDDEGGFVA  
YVNREVPSSPDPLHNR\*  
>ScoCLE1  
MLARTSIVLLLMIKVTIQQDVLGGRGYLMEQDNNNINMEDNAQSPVATTRSINHIIGDDEGGFVA  
YVNREVPSSPDPLHNR\*  
>SbCLE1  
MLARTSIVLILMIFVTIQQDVLGGRGYLMEQDNNNINMEENAQSPVATTRNISHIIGDDEGGFVA  
YVNREVPSSPDPLHNR\*  
>SaCLE1  
MLARTSIVLILMIFVTIQQDVLGGRGYLMEQDNNNINMEDNAQSPVATTRNISHIIGDDEGGFVA  
YVNREVPSSPDPLHNR\*  
>SvCLE2  
MGPAVMARIREIMFFLLFVFFLNGATRGKAQLSTLPQKGAAFFPPKMPVPPSGPSKKHNSVPKL  
RFIPATVVYGSKRRVPSGTNPLHN\*  
>SphCLE2  
MGPAVMARIREIMFFLLFVFFLNGATRGKAQLSTLPQKGAAFFPPKMPVPPSGPSKKHNSVPKL  
RFIPATVVYGSKRRVPSGTNPLHN\*  
>SjCLE2  
MGPAVMARIREIMFFLLFVFFLNGATRGKAQLSTLPQKGAAFFPSKMPVPPSGPSKKHNSVPKL  
RFIPATVVYGSKRRVPSGTNPLHN\*  
>ScuCLE2  
MGPAVMARIREIKFFLLFVFFLNGATRGKAQLSTLPQKGAAFFPPKMPVPPSGPSKKHNSVPKL  
RFIPATVVYGSKRRVPSGTNPLHN\*  
>SbCLE2  
MGPAVMARIREIMFFLLVCFLNGATRGKAQLSTLPQKGAAFFPPSKMPVPPSGPSKKHNFVPKL  
RFIPATVVYGSKRRVPSGTNPLHN\*  
>SaCLE2  
MGPAVMARIREIMFFLLFVFFLNGATRGKAQLSTLPQKGAAFFPSKMPVPPSGPSKKHNSVPKL  
RFIPVTVVYGSKRRVPSGTNPLHN\*  
>ScuCLE2  
MGPAVMARIHEIMFFILFVFFLNGATRGKAQLSTLPQKGATFFPPKMPVPPSGPSKKHNSVPKL  
HFILAIVVYGSKHRVPFGTNPLHN\*  
>SchCLE2

MGFPAVMRICEIMFFLLFVCFNGATRGKAQLSTLPQKGAAFFPPKMPVPPSGPSKKHNFVPKL  
RFIPATVVYGSKCRVPSGKNPLHN\*

>SchCLE3

MGGDGTRRSSSLMALLLSFLCFVSAEILVKPAAKTVTTINQHLEAERIETERHSLQRTNLN  
YVSKRRVPSEPDPIHNRYFQCFNISPCNIHE\*

>ScuCLE3

MGGDGARRSSSLMALLLSFLCFVSAEILVKPAAKTVTTINQHLEAERIETERHSLQRTNLN  
YVSKRRVPSEPDPIHNRYFQCFNIPPCNIHE\*

>ScoCLE3

MGGDGARHSSSLMALLLSFLCFVSAEILVKPAAKTVTTINQHLQAERIETERHSLQSTNLN  
YVSKRRVPSEPDPIHNRYFQCFNIPPCNIHK\*

>SbCLE3

MGGDGARRSSNLLMALLLSFLCFVSAEILVKPAAKAVTGTTSNQHLEAEGIETERHSLQRTNLN  
YVSKRRVPSEPDPIHNRYFQCFNIPPCNIHE\*

>SphCLE3

MGGDGARRSSSLMALLLSFLCFVSAEILVKPAAKTVTTINQHLEAERIETERHSLQRTNLN  
YVSKRRVPSEPDPIHNRYFQCFNIPPCNIHE\*

>SvCLE3

MGGDGARRSSSLMALLLSFLCFVSAEILVKPAAKTVTTINQHLEAERIETERHSLQRTNLN  
YVSKRRVPSEPDPIHNRYFQCFNIPPCNIHK\*

>SaCLE3

MGGDGARRSSSLMALLLSFLCFVSAEILVKPAAKTDTGTTINQHLEAERIETERHSLQRTNLN  
YVSKRRVPSEPDPIHNRYFQCFNIPPCNIHE\*

>SaCLE4

MSSTSRLFLLWFIIILLSYCICLESRPLETLLPRKRSTLMETAKEILRERLQRKDAFKYHVNRSPDG  
PDPRHH\*

>ScoCLE4

MASISRFLLCFIIILHSYCISLESRPLETLLPRKRSTLMETAQEILRERLQRKDAFKYHINRLSPGGP  
DPRHH\*

>SjCLE4

MASTSRLFLLWFIIILLSYCISLESRPLETLLPRKRNTLMETAQEILRERLQRKDAFKYHINRLSPSGP  
DPRHH\*

>ScuCLE4

MASTSRLFLLWFIIILLSYCISLESRPLETLLPRKRSTLMETAQEILRERLQRKDAFKYHVNRSPDG  
PDPRHH\*

>SbCLE4

MASASRLFLLWFIIILLSYCLSLESRPLETLLPRKRSTLMETAQEILRERLQRKDAFKYHVNRSPD  
GPDPRHH\*

>SchCLE4

MASASRLFLLWFIIILLSYCLSLESRPLETLLPRKRSTLMETAQEILRERLQRKDAFKYHVNRSPD  
GPDPRHH\*

>SphCLE4

MASASRLFLLWFIIILLSYCLSLESRPLETLLPRKRSTLMETAQEILRERLQRKDAFKYHVNRSPD  
GPDPRHH\*

>SphCLE5

MDNSNSILSLVFLLLLFAKANNIATSYGGVESTRRKVDSQHILHEIIFDLGRKMKNMQFNNKR  
ALVDEDRLAPGGPDPQHH\*

>ScuCLE5

M DNSNSILSLVFLLLLFAKANNIATSYGGVESTRRKVDSQHILHEIIFDLGRKMKNMQINNKRA  
LVDEDRLAPGGPDPQHH\*

>SbCLE5

M DNSNSILSLVFLLLLFAKANNIATSYGGVESTRRKVDSQHILHEIIFYLGRKMKNMQFNNKR  
ALVDEDRLAPGGPDPQHH\*

>SjCLE5

M DNSNSILSLVFLLLLFAKANNIATSYGGVESTRRKLD SQHILHEIIFDLERKMKNMQINNKRA  
ALVDEDRLAPGGPDPQHH\*

>SchCLE5

MDNSKSILSLVFLLLLFAKVNNSIATSYGGVESTRRKIVLHEIIFDLGRKMKNMQINNKRALVDE  
DRLAPGGPDPQHH\*

>SvCLE5

MDNSKSILSLVFLLLLFAKVNNSIATSYGGVESTRRKIVLHEIIFDLGRKMKNMQINNKRALVDE  
DRLAPGGPDPQHH\*

>ScoCLE5

MDNSKSILSLVFLLLLFAKVNNSIATSYGGVESTRRKIVLHEIIFYLGRKMKNMKINNKRALVDE  
DRQAPGGPDPQHH\*

>SaCLE5

MDNSKSILSLVFLLLLFAKVNNSIATSYGGVESTRRKIVLHEIIFDLGRKMKNMQINNKRALVDE  
DRLAPGGPDPQHH\*

>SjCLE5\_2

MDNSKSILSLLFLLLLFAKVNNSIATSYGGVESTRRKIVLHEIIFDLGRKMKNMQINNKRALVDED  
RLAPGGPDPQHH\*

>SbCLE5\_2

MDNSKSILSLLFLLLLFAKVNNSIATSYGGVESTRRKIVLHEIIFDLGRKMKNMQINNKRALVDED  
RLAPGGPDPQHH\*

>SphCLE6

MDSSSDRIRMYKRLWGSIVLLGVVWLLSVLENRGTKMLKKQRPNIIHSKMKNFMSIKRRVP  
NGPDIHNRYNVNLIIYAFNLI\*

>SbCLE6

MDSSSDRIRMYKRLWGSIVLLGVVWLLSVLENRGTKMLKKQRPNIIHSKMKNFMSIKRRVP  
NGPDIHNRYNVNLIIYAFNLI\*

>ScoCLE6

MDSSSDRIRMYKRLWGSIVLLGVVWLLSVLENRGTKMLKKQRPNIIHSKMKNFMSIKRRVP  
NGPDIHNRYNVNLIIYAFNLI\*

>ScuCLE6

MDSSSDRIRMNKRLWGSIVLLGVVWLLSVLENRGAKMLKKQRPNIIHSKMKNFMSIKRRVP  
NGPDIHNRYNVNLIIYAFNLI\*

>SvCLE6

MDSSSDRIRMYKRLWGSIVLLGVVWLLSVLENRGTKMLKKQRPNIIHSKMKNFMSIKRRVP  
NGPDIHNRYNVNLIIYAFNLI\*

>SchCLE6

MDSSSDRIRMYKRLWGSIVLLGVVWLLSVLENRGTKMLKKQRPNIIHSKMKNFMSIKRRVP  
NGPDIHNRYNVNLIIYAFNLI\*

>SaCLE7

MVFISNKTFVFLICIGLLVVCSHSQQQNELRLSTSRRMLKGLVTEEELENTGFKSAPVSKTFDPNG  
SSKRKVRKGSDPIHNRS\*

>SvCLE7

MVFISNKAFVFLICIGFLVVCSHSQQQNELRLSTSRRMLKGLVTEEELENTGFKSAPVSKTFDPNG  
SSKRKVRKGSDPIHNRS\*

>ScoCLE7

MVFISNKTFVFLICIGLLVVCSHSQQQNELRLSTSRRMLKGLVTEEELENTGFKSAPVSKTFDPNG  
SSKRKVRKGSDPIHNRS\*

>ScuCLE7

MVFISNKTFVFLICIGFLVVCSHSQQQNELRLSTSRRMLKGLVTEEELENTGFKSAPVSKTFDPNG  
SSKRKVRKGSDPIHNRS\*

>SbCLE7

MVFISNKTFVFLICIGLLVVCSHSQQQNELRLSTSRRMLKGLVTEKELENNTGMKSAPVSKTFDPN  
GSSKRKVRKGSDPIHNRS\*

>SjCLE7

MVFISNKTFVFLICIGFLVVCSHSQQQNELRLSTSRRMLKGLVTEEELENTGMKSAPVSKTFDPNG  
SSKRKVRKGSDPIHNRS\*

>SchCLE7

MVFISNKTFVFLICIGFLVVCSHSQQNELRISTSRRMLKGLVTEELNTGMKSAPVSKTFDPNG  
SSKRKVRKGSDPIHNR\*

>SphCLE7

MVFISNKTFVFLICIGFLVVCSHSQQNELRISTSRRMLKGLVTEELNTGMKSAPVSKTFDPNG  
SSKRKVRKGSDPIHNR\*

>SbCLE8

MTLYNIISLLTIFFFLVTIVMSDDQQVEPSTLQDHDAIKKNIPKPLSTERRNYKEDQVSSTIMGR  
KGKNHQSQKWRDKSLNVNAHEVPSGPNPISNR\*

>ScuCLE8

MTLYNIISLLTIFFFLVTIVMSDDQQVEPSTLQDHDAIKKNIPKPLSTERRNYKEDQVSSTIMGR  
KGKNHQSQKWRDKSLNVNAHEVPSGPNPISNR\*

>SphCLE8

MTLYNIISLLTIFFFLVTIVMSDDQQVEPSTLQDHDAIKKNIPKPLSTERRNYKEDQVSSTIMGR  
KGKNHQSQKWRDKSLNVNAHEVPSGPNPISNR\*

>SchCLE8

MTLYNIISLLTIFFFLVTIVMSDDQQVEPSTLQDHDAIKKNIPKPLSTERRNYKEDQVSSTIMGR  
KGKNHQSQKWRDKSLNVNAHEVPSGPNPISNR\*

>SjCLE8

MTLYNIISLLTLFFFITIVMSDDQQVEPSTLQDHDAIKKNIPKPVSTERRNDKEDQVSSTIMGR  
KGKNHQSQKWRDKSLNVNVHEVPSGPNPISNR\*

>SvCLE8

MTLYNIISLLTLFFFITIVMSDDQQVEPSSLQDHDAIKRNIPKHLSTERRNYKEDQVSSTIM  
GRKGKNHQSQKWRDKSLNVNAHEVPSGPNPISNR\*

>ScoCLE8

MTLYNIISLLTLFFFITIVMSDDQQVEPSSLQDHDAIKRNIPKHLSTERRNYKEDQVSSTIMGR  
KGKNHQSQKWRDKSLNVNAHEVPSGPNPISNR\*

>SaCLE8

MTLYNIISLLTLFFFITIVMSDDQQVEPSSLQDHDAIKRNIPKHLSTERRNYKEDQVSSTIMGR  
KGKNHQSQKWRDKSLNVNAHEVPSGPNPISNR\*

>SaCLE9

MAIRIFPTNPVALSETNFTSTKINQTEIFQKYFHDIIVNNNNNNNNNGTRNGTALLHDNKRRVPSC  
PDPLHNK\*

>SphCLE9

MAIRIFPTNPVALSETNFTSTKINQTEIFQKYFHDIIVNNNNNNNNNGTRNGTALLHDNKRRVPSC  
PDPLHNK\*

>SvCLE9

MAIRIFPTNPVALSETNFTSTKINQTEIFQKYFHDIIVNNNNNNNNNGTRNGTALLHDNKRRVPSCP  
DPLHNK\*

>SjCLE9

MAIRIFPTNPVALSETNFTSTKINQTEIFQKYFHDIIVNNNNNNNNNGTRNGTALLHDNKRRVPSCP  
DPLHNK\*

>ScoCLE9

MAIRIFPTNPVALSETNFTSTKINQTEIFQKYFHDIIVNNNNNSNNNNNGTRNGTALLHDNKRRVPS  
CPDPLHNK\*

>SbCLE9

MAIRIFPTNPVALSETNFTSTKINQTEIFQKYFHDIIVNNNNNNNNNGTRNGTALLHDNKRRVPS  
CPDPLHNK\*

>SchCLE9

MAIRIFPTNPVALSETNFTSTKINQTEIFQKYFHDIIVNNNNNNNNNGTRNGTALLHDNKRRVPSCP  
PLHNK\*

>ScuCLE9

MAIRIFPTNPVALSETNFTSTKINQTEIFQKYFHDIIVNNNNNNNNNGTRNGTALLHDNKRRVPSCP  
PLHNK\*

>SaCLE10

MLLILFMIIFLFCHFISLEGRLGDLQVVRTKYDSHFVLSKAGFSLTEIEYTRRSLKGGSDRVAPG  
GPDPQHHSLPPTN\*

>ScuCLE10

MLLILFMIIFLFCHFISLEGRILGDLQVVRTKYDSHFVLSKAGFSLTEIEYTRRSLKGGSDRVAPG  
GPDPQHHSLPPTN\*  
>SphCLE10  
MLLILFMIIFLFCHFISLEGRILGDLQVQTKYDSHFVLSKAGFSLTEIEYTRRSLKGGSDRVAPG  
GPDPQHHSLPPTN\*  
>SjCLE10  
MLLILFMIIFLFCHFISLEGRILGDLQVVQTKYDSHFVLSKAGFSLTEIEYTRRSLKGGSDRVAPG  
GPDPQHHSLPPTN\*  
>ScoCLE10  
MLLILFMIIFLFCHFISLEGRILGDLQVVQIKYDSHFVLSKAGFSLTEIEYTRRSLKGGSDRVAPGG  
PDPQHHSLPPTN\*  
>SchCLE10  
MLLILFMIIFLFCHFISLEGRILGDLQVVQTKYDSHFVLSKAGFSLTEIEYTRRSLKGGSDRVAPG  
GPDPQHHSLPPTN\*  
>SbCLE10  
MLLILFMIIFLFCHFISLEGRILGDLQVVQTKYDSHFVLSKAGFSLTEIEYTRRSLKGGSDRVAPG  
GPDPQHHSLPPTN\*  
>SvCLE10  
MLLILFMIIFLFCHFISLEGRILGDLQVVQTKYDSHFVLSKAGFSLTEIEYTRRSLKGRSDRVAPG  
GPDPEHHSSPPTN\*  
>SaCLE11  
MELVLMLLCMLIVTSMILGCACHEAVERPIIRPHRLSLREFGYDESTLEYYKRRAMLLDVGTMRV  
APQGPDAQHHSQSPTMS\*  
>SbCLE11  
MELVLMLLCMLIVTSMILGSCACHEAVERPIIRPHRLSLREFGYDESTLEYYKRRAMLLDVGTMRVA  
PQGPDAQHHSQSPTMS\*  
>SchCLE11  
MELVLMLLCMLIVTSMILGCACHEAVERPIIRPHRLSLREFGYDESTLEYYKRRAMLLDVGTMRV  
APQGPDAQHHSQSPTMS\*  
>ScoCLE11  
MELVLMLLCMLIVTSMILGCACHEAVERPIIRPHRLSLREFGYDESTLEYYKRRAMLLDVGTMRV  
APQGPDAQHHSQSPTMS\*  
>SphCLE11  
MELVLMLLCMLIVTSMILGCACHEAVERPIIRPHRLSLREFGYDESTLEYYKRRAMLLDVGTMRV  
APEGPDAQHHSQSPTMS\*  
>SvCLE11  
MELVLMLLCMLIVTPMILRCACHEAVERSIRPHRLSLREFGYDESTLEYYKRRAMLLDVGTMRV  
APEGPDAQHHSQSPTMS\*  
>ScuCLE11  
MELVLMLLCMLIVTSMILGCACHEAVERPIIRPHRLSLREFGYDESTIEYYKRRAMLLDVGTMRVA  
PEGPDAQHHSQSPTMS\*  
>SjCLE11  
MELVLMLLCMLVVTSMILGCACHEAVERPIIRPHHLSLRKFGYDEPTLEYYKRRAMLLDVGTMRV  
APEGPDAQHHSQSPTMS\*  
>SphCLE12  
MATFKSQFLYFITLFLILFILVHSNHHDQNSDPNYSSSSSSSSSTSSTTRATMKLHPRKIPKNQAE  
YGGAAHEVPSGPNPISNR\*  
>SchCLE12  
MATFKSQFLYFITLFLILFILVHSNHHDQNSDPNYSSSSSSSSSTSSTTRATMKLHPRKIPKNQAEY  
GGAAHEVPSGPNPISNR\*  
>SvCLE12  
MATFKSQFLYFITLFLILFILVHSNNHHDQNSDPNYSSSSSSSSSTSSTTRATMKLHPRKIPKNQ  
AEYGGAAHEVPSGPNPISNR\*  
>SjCLE12\_2  
MATSSQFSTFKSQFLYFITLFFFILVHSNHHDPNYSSSSSSSSSTSSTTRATMKLHPRKIPKN  
QAEYGGAAHEVPSGPNPISNR\*  
>SjCLE12\_break

QSFYFITLFLILFILVHSNHHDQNSDPNYSSSSSSSTSSTRATMKLHPRKIPKNQAEGAAAH  
EVPSGPNPISNR\*

>ScoCLE12

MATFKSQSFLHFITLFLILFILVHSNHHDQNSDPNYSSSSSSSTSSTRATMKLHPRKIPKNQAEG  
GAAHEVPSGPNPISNR\*

>SbCLE12

MATFKSQSFLYFITLFLILFILVHSNHHDQNSDPNYSSSSSSSTSSTRATMKLHPRKIPKNQAEG  
GAAAHEVPSGPNPISNR\*

>SaCLE12

MATFKSQSFLYFITLFLILFILVHSNHHDQNSDPNYSSSSSSSTSSTRATMKLHPRKIPKNKAE  
YGGAAHEVPSGPNPISNR\*

>SvCLE13

MAKTTQSCTLFYLLLFIWLLMNIFPSSGKLVTMQVHHKQSTPTDIDTTMTTTTMTTTVSTG  
GTGTPSRKYYGEALHEVPSGANPESNK\*

>SbCLE13

MAKTTQSCTLFFLLLFIWLLMNIFPSSGKSVTMQVHHKQSAPTDTMTTTTMTTTVGTGGTG  
TPSRKYYGEALHEVPSGANPESNK\*

>ScuCLE13

MAKTTQSCTLFFLLLFIWLLMNIFPSSGKSVTMQVHHKQSAPTDIDTTMTTTTMTTTVGTGGT  
GTPSRKYYGEALHEVPSGANPESNK\*

>SchCLE13

MAKTTQSCTLFFLLLFIWLLMNIFPSSGKSVTMQVHHKQSAPTNTDTMTTTTMTTTVGTDG  
TSTPSRKYYGEALHEVPSGANPESNK\*

>SphCLE13

MAKTTQSCTLFFLLLFIWLLMNIFPSSGKSVTMQVHHKQSAPTDTDTMTTTTMTTTVGTGG  
TGTPSRKYYGEALHEVPSGANPESNK\*

>SjCLE13

MAKTTQSCTLFFLLLFIWLLMNIFPSSGKSVTMQVHHKQSAPTDTDTMTTTTMTTTIGTGGT  
GTPSRKYYGEALHEVPSGANPESNK\*

>ScoCLE13

MAKTTQSCTLFFLLLFIWLLMNIFPSSGKSVTMQVHHKQSAPTDTDTMTTTTMTTTVGTG  
GTGTPSRKYYGEALHEVPSGANPESNK\*

>SaCLE13

MAKTTQSCTLFFLLLFIWLLMNIFPSSGKSVTMQVHHKQSAPTDTDTMTTTTMTTTVGTGG  
TGTPSRKYYGEALHEVPSGANPESNK\*

>SvCLE14

MGGMKAFLGALVLLSLLWLILYGILVNQETKIIATTIDRLDFWKITQTERYDLQKSLNYVSKRIQ  
INAIPNRKAGKGTRAATKNVSARAIIKHDVWKIIAEKQYLQRNPNFNYVSKRRVPTGPNAIH  
RFIYSIYYTIFFIFKKTNFIVNKVDVTWFSGK\*

>SjCLE14

MGGMKAFLGALVLLSLLWFILYGILVNQETKKIATTIDRLDFWKITQTERYDLQKSLNYVSKRI  
QINAIPNRKAGKGTRAATKNVSARAIIKHDVWKIIAEKQYLQRNPNFNYVSKRRVPTGPNAIH  
RFIYSIYYTIFFIFKKTNFIVNKVDVTWFSGK\*

>ScoCLE14

MGGMKAFLGALVLLSLLWFILYGILVNQETKKIATTIDRLDFWKITQTERYDLQKSLNYVSKRI  
QINAIPNRKAGKGTRAATKNVSARAIIKHDVWKIIAEKQYLQRNPNFNYVSKRRVPTGPNAIH  
RFIYSIYYTIFFIFKKTNFIVNKVDVTWFSGK\*

>SbCLE14

MGGMKAFLGALVLLSLLWLILYGILVNHETKKIATTIDRLDFWKITQTERYDLQKSLNYVSKRI  
QINAIPNRKAGKGTRAATKNVSARAIIKHDVWKIIAEKQYLQRNPNFNYVSKRRVPTGPNAIH  
RFIYSIYYTIFFIFKKTNFIVNKVDVTWFSGK\*

>SchCLE14

MGGMKAFLGALVLLSLLWLILYGILVNHETKNIATTIDRLDFWKITQTERYDLQKSLNYVSKRI  
QINAIPNRKAGKGTRAATKNVSARAIIKHDVWKIIAEKQYLQRNPNFNYVSKRRVPTGPNAIH  
RFIYSIYYTIFFIFKKTNFIVNKVDVTWFSGK\*

>SaCLE14

MGGMKAFLGALVLLSLLWLILYGILVNHETKNITATTIDRLDFWKITQTERYDLQKSLNYVSKRI  
QINAIPNRKAGKGTRAATKNVSARAICKHVDVWKIIAEKQYLQRNPNFNYVSKRRVPTGPNAIH  
NRFIYSIYYTIFFIFKKTNFIVNKVDVTWFSGK\*

>SphCLE14

MGGMKAFLGALVLLSLLWLILYGILVNHETKNITATTIDRLDFWKITQTERYDLQKSLNYVSKRI  
QINAIPNRKAGKGTRAATKNVSARAICKHVDVWKIIAEKQYLQRNPNFNYVSKRRVPTGPNAIH  
NRFIYSIYYTIFFIFKKTNFIVNKVDVTWFSGK\*

>SphCLE15

MSSINTKHFTLLVLLICFLVIQESHGLSLKEVAPVKPLNRKVLEKQWAAGKVYYKHAEKINEKF  
ADWELRGVPAGPDPLHHNGASPCKPKTP\*

>SchCLE15

MSSINTKHFTLLVLLICFLVIQESHGLSLKEVAPVKPLNRKVLEKQWAAGKVYYKHAEKINEKF  
ADWELRGVPAGPDPLHHNGASPCKPKTP\*

>SjCLE15

MSLINTKHFTLFVLLICFLVIQESHGLSLKEVAPVKLLNRKVLESQWTAFGKVYYKHAENINEKF  
ADWELRGVPAGPDPLHHNGASPCKPKTP\*

>ScuCLE15

MSLINTKHFTLFVLLICFLVIQESHGLSLKEVAPVKLLNRKVLESQWAAGKVYYKHAEKINEKF  
ADWELRGVPAGPDPLHHNGASPCKPKTP\*

>SvCLE15

MSVINAKHFTLFVLLICFLVIQESHGLSLKEVAPVKLLNRKVLEKQWAAGKVYYKHAEKINEKF  
ADWELRGVPAGPDPLHHNGASPCKPKTP\*

>ScoCLE15

MSLINAKHFTLFVLLICFLVIQESHGLSLKEVAPVKPLNRKVLEKQWAAGKVYYKHAEKINEKF  
ADWELRGVPAGPDPMHHNGASPCKPKTP\*

>SbCLE15

MSLINAKHFTLFVLLICFLVIQESHGLSLKEVAPVKPLNRKVLEKQWAAGKVYYKHAEKINEKF  
ADWELRGVPAGPDPLHHNGASPCKPKTP\*

>SphCLE16

MAKTTTQPQILLFFFLLLMNTYSLGFNVRALRDYSPTSKKSTMHVLSKKSTTTTTITVTTPTRV  
AATHNARGQFGVAAHSVPSGPNPESNR\*

>SbCLE16

MAKTTTQPQILLFFFLLLMNTYSLGFNVRALRDYSPTSKKSTMHVLSKKSTTTTTITVTTPTRV  
VATHNARGQFGVAAHSVPSGPNPESNR\*

>SaCLE16

MAKTTTQPQILLFFFLLLMNTYSLGFNVRALRDYSPTSKKSTMQVLPKKSITTTTTTVTIPTR  
VAATHNARGQFGVAAHSVPSGPNPESNR\*

>SchCLE16

MAKTTTQPQILLFFFLLLMNTYSLEFNVRALRDYSPTSKKSTMQCSFPKKSTTTTTVTTPMR  
VAATHNVRGQFGVAAHSVPSGPNPESNR\*

>SvCLE16

MAKTTTQPQILLFFFLLLMNTYSLGFNVRALRDYSSTTKKSTMQVLPKKSTTTTTVTTPM  
RVAATHNVRGQFGVAAHSVPSGPNPESNR\*

>SjCLE16

MAKTTTQPQILLFFFLLLMNTYSLGFNVRALRDYSPTSKKSTMQVLPKKSTTTTTVTTPM  
RVAATHNARGQFGVAAHSVPSGPNPESNR\*

>ScuCLE16

MAKTTTQPQILLFFFLLLMNTYSLGFNVRALRDYSPTSKKSTMQVLPKKSTTTTTVTTPM  
RVAATHNARGQFGVAAHSVPSGPNPESNR\*

>ScoCLE16

MAKTTTQPQILLFFFLLLMNTYSLGFNVRALRDYSPTTKKSTMQVLPKKSTTTTTVTTPMR  
VAATHNARGQFGVAAHSVPSGPNPESNR\*

>SaCLE17

MAVIFKIVTKKCLFALILSIAIVFCLIHGWCNYSDNVILSHRRELIATKFDFPFMPRHHRKHLSP  
SPETEIDPVYGVEKRLVPTGPNPLHH\*

>ScoCLE17

MAVIFKIVTKKCLFALILSIAIVFCLIHGWCNYPDTVLSSRRELIATKFDFTPMPRHHHRKHLSPS  
PETEIDPVYGVKEKRLVPTGPNPLHH\*  
>SvCLE17  
MAVIFKIVTKKCLFALILSIAIVFCLIHGWCNYSNDNVILSSRRELIATKFDFTPMPRHHHRKHLSPS  
PETEIDPVYGVKEKRLVPSGPNPLHH\*  
>SbCLE17  
MAVIFKIVTKKCLFALILSIAIVFCLIHGWCNYSNDNVILSSRRELIATKFDFTPMPRHHHRKHLSPS  
PETEIDPVYGVKEKRLVPTGPNPLHH\*  
>SjCLE17  
MAVIFKIVTKKCLFALILSIAIVFCLIHGWCNYSNDNVILSRRRELIATKFDFTPMPRHRHRKHLSPS  
PETEIDPVYGVKEKRLVPTGPNPLHH\*  
>ScuCLE17  
MAVIFKIVTKKCLFALILSIAIVFCLIHGWCNYSNDNVILSRRRELIATKFDFTPMPRHRHRKHLSPS  
PETEIDPVYGVKEKRLVPTGPNPLHH\*  
>SchCLE17  
MAVIFKIVTKKCLFALILSIAIVFCLIHGWCNYSNDNVILSRRRELIATKFDFTPMPRHRHRKHLSPS  
PETEIDPVYGVKEKRLVPTGPNPLHH\*  
>SphCLE17  
MAVIFKIVTKKCLFALILSIAIVFCLIHGWCNYSNDNVILSRRRELIATKFDFTPMPRHRHRKHLSPS  
PETEIDPVYGVKEKRLVPTGPNPLHH\*  
>SphCLE18  
MGLKVPHVICFVLWFSILVLLFQEKFKLKNNNKVIIYNDHDHFLFGQRKTLIASNFDFTPFVKHV  
HHHHHHHHHHHKVDVYEPAGSHEIDQRYGVEKRLVPTGPNPLHH\*  
>SchCLE18\_1  
MGLKVPHVICFVLWFSILVLLFQEKFKLKNNNKVIIYNDHDHFLFGQRKTLIASNFDFTPFVKHV  
HHHHHHHHHHHKVDVYEPAGSHEIDQRYGVEKRLVPTGPNPLHH\*  
>SbCLE18\_1  
MGLKVPHVICFVLWFSILVLLFQEKFKLKNNNKVIIYNDHDHFLFGQRKTLIASNFDFTPFVKHV  
HHHHHHHHHHHQADVYEPAGSHEIDQRYGVEKRLVPTGPNPLHH\*  
>SaCLE18  
MGLKVPHVICFVLWFSILVLLFQEKFKLKNNNKVIIYNDHDHFLFGQRKTLIASNFDFTPFVKHV  
HHHHHHHHHQDVYEPAGSHEIDQRYGVEKRLVPTGPNPLHH\*  
>ScuCLE18  
MGLKVPHVICFVLWFSILVLLFQEKFKLKNNNKVIIYNDHDHFLFGQRKTLIASNFDFTPFVKHV  
HHHHHHHHHQDVYEPAGSHEIDQRYGVEKRLVPTGPNPLHH\*  
>ScoCLE18  
MGLKVPHVICFVLWFSILVLLFQEKFKLKNNNTVIIYNDDDHHSLGQRKTLISSNFDFTPFVKHV  
HHHHHHHHHQDDVYEQPEAEVGSHEDQRYGVEKRLVPTGPNPLHH\*  
>SjCLE18  
MGLKVPHVICFVLWFSILVLLFQEKFKLKNNNKVIIYNDHDHHSLGQRKTLISSNFDFTPFVKHV  
HHHHHHHHHRDDVYEQPEAEVGSHEDQRYGVEKRLVPTGPNPLHH\*  
>SvCLE18  
MGLKVPHVICFVLWFSILVLLFQEKFKLKNNNKVIIYNDHDHHSLGQRKTLIASNFDFTPFVKHV  
HHHHHHHHHRDDVYEQPEAEVGSHEDQRYGVEKRLVPTGPNPLHH\*  
>SbCLE18\_2  
MGLKVPHVICFVLWFSILVLLIQEKFKLKNNNKVIIYNDHDHFLFGQRKTLIASNFDFTPFVKHV  
HHHHHHHHHRDDVYEQPEAEVGSHEDQRYGVEKRLVPTGPNPLHH\*  
>SchCLE18\_2  
MGLKIPHVICFVLWFSILVLLFQEKFKLKNNNKVIIYNDHDHFLFGQRKTLIASNFDFTPFVKHV  
HHHHHHHHHRDDVYEQPEAEVGSHEDQRYGVEKRLVPTGPNPLHH\*  
>SaCLE19  
MDNIRKFSKCFLSFFVFLVFVWLILLIEVFENGGITRMNYVDQVMNSKVVMKTHKRSSSSHVHP  
KIDFNLSVKRRVPNGPDPPIHNRRARSSRRPPGQASKGKLNIKP\*  
>SbCLE19  
MDTIRKFSKCFLSFFVFLVFVWLILLIEVFENGGITRMNYVDQVMNSKVVMKTHKRSSSSHVHP  
KIDFNLSVKRRVPNGPDPPIHNRRARSSRRPPGQASKGKLNIKP\*  
>ScoCLE19

MDNIRKFSKCFLSFFVFLVFVWLLIEVFENGGITRMNYVDQVMKNSKVMKTHKRSSSHVHP  
KIHFNLVSKRRVPNGPDPIHNRARSSRRPPGQASKGKLNIKP\*  
>SvCLE19  
MDNIRKFSKCFLSFFVFLVFVWLLIEVFENGGIARMNYVDQVMKNSKVMKTHKRSSSHVHP  
KIDFNLVSKRRVPNGPDPIHNRARSSRRPPGQASQGKLNIKP\*  
>SphCLE19  
MDNIRKFSKCFLSFFVFLVFVWLLVEVFENGGITRMNYVDDQVMKNSKVMKITHKRSSSHV  
HPKIDFNLVSKRRVPNGPDPIHNRARSSRRPPGQASKGKLNIKP\*  
>SjCLE19  
MDNIRKFSKCFLSFFVFLVFVFAWLLVEVFENGGITRMNYVDDQVMKNSKVMKITHKRSSSHV  
HPKIDFNLVSKRRVPNGPDPIHNRARSSRRPPGQASKGKLNIKP\*  
>ScuCLE19  
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HPKIDFNLVSKRRVPNGPDPIHNRARSSRRPPGQASKGKLNIKP\*  
>SchCLE19  
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HPKIDFNLVSKRRVPNGPDPIHNRARSSRRPPGQASKGKLNIKP\*  
>SphCLE20  
MNIFHFVFFFLLIITTSSRIQALRQLPEQVSGTPAARKSQVFHPIVIAPAAQVFESFKRIPTGSNPLH  
NKKR\*  
>SchCLE20  
MNIFHFIFFFLLIITTSSRIQALRQLPEQVSGTPAARKSQVFHPLVIAPAAQDFESFKRIPTGSNPLH  
NKKR\*  
>SvCLE20  
MNIFHFIFFFLLIITTSSRIQALRQLPEQVSGTPAARKSQVFHPLVIAPAAQDFESSKRIPTGSNPLH  
NKKR\*  
>SjCLE20  
MNIFHFIFFFLLIITTSSRIQALRQLPEQFSGTPVARKSQVFHPIVIAPAAQDFESFKRIPTGSNPLH  
NKKR\*  
>ScuCLE20  
MNIFHFIFFFLLIITTSSRIQALRQLPEQVSGTPAARKSQVFHPIVIAPAAQDFESFKRIPTGSNPLH  
NKKR\*  
>ScoCLE20  
MNIFHFIFFFLLIITTSSRIQALRQLPARKSQVFHPIVIAPAAQDFESFKRIPTGSNPLHNKKR\*  
>SbCLE20  
MNIFHFIFFFLLIITTSSRIQALRQLPEQVSGTPAARKSQVFHPIVIAPAAQDFESFKRIPTGSNPLH  
NKKR\*  
>SaCLE20  
MNIFHFIFFFLLIITTSSRIQALRQLPEQVSGTPAARKSQVFHPIVIAPAAQDFESFKRIPTGSNPLH  
NKKR\*  
>SaCLE21  
MSCPSCGVMFLILCIGFLSTQPERVSALRSIDLALRGEDNLFLRLSSRILKAAVVQDLQTQLNIA  
PAPSMTFDPNQSNKRRVKRGSDPIHNKC\*  
>ScoCLE21  
MLCPSCRVMLILCIGFLSTQPERVSALRSIDLALRGEDNLFLRLSSRILKAAVVQDLQTQLDIA  
PAPSMTFDPNQSNKRRVKRGSDPIHNKC\*  
>ScuCLE21  
MLCPSCRVMLILCIGFLSTQPERVSALRSIDLALRGEDNLFLRLSSRILKAAVVQDLQTQLNIA  
PAPSMTFDPNQSNKRRVKRGSDPIHNKC\*  
>SjCLE21  
MLCPSCRVMLILCIGFLSTQPERVSALRSIDLALRGEDNLFLRLSSRILKAAVVQDLQTQLNIA  
PAPSMTFDPNQSNKRRVKRGSDPIHNKC\*  
>SvCLE21  
MLCPSCRVMLILCIGFLSTQPERVSALRSIDLALRGEDNLFLRLSSRILKAAVVQDLQTQLNIA  
PAPSMTFDPNQSNKRRVKRGSDPIHNKC\*  
>SchCLE21

MLCPSCRVMFLICIGFLSTQPERVSALRSIDLALRGEDNLFLRLSSRILKAAVVQDLQTQLNIA  
PAPSMTFDPNQSNKRRVKRGSDPIHNKC\*

>SphCLE21

MLCPSCRVMFLICIGFLSTQPERVSALRSIDLALRGEDNLFLRLSSRILKAAVVQDLQTQLNIA  
PAPSMTFDPNQSNKRRVKRGSDPIHNKC\*

>SaCLE22

MKIQYSSFQFLILVIILFVSQLSSCRKIQEITPTSIEQKLNSTISWHNSAPSPKSRNEDIDKSYRVS  
HRTVPGGPNPLHN\*

>ScuCLE22

MKIQYPSFQFLILVIILFVSQLSSCRKIQEITPTSIEQRLNSTISWHNSAPSPKSRNEDIDKSYRVS  
HRTVPGGPNPLHN\*

>SphCLE22

MKIQYPSFQFLILVIILFVSQLSSCRKIQEITPTSIEQRLNSTISWHNSAPSPKSRNEDIDKSYRVS  
HRTVPGGPNPLHN\*

>SchCLE22

MKIQYPSFQFLILVIILFVSQLSSCRKIQEITPTSIEQRLNSTISWHNSAPSPKSRNEDIDKSYRVS  
HRTVPGGPNPLHN\*

>SvCLE22

MKIQYPSFQFLILVIILFISQLSSCRKIQEITPTSIEQRLNSTISWNNsapspkksrnedidksyrvsh  
RTVPGGPNPLHN\*

>SjCLE22

MKFQYPSFQFLILVIILFVSQLNSRKRQEITPTSTEQRLNSKISWHNSAPSPKSRNEDIDKSYRV  
SHRTVPGGPNPLHN\*

>ScoCLE22

MKIQHPSFQFLILVIILFVSQLSSCRKIQEITPASIEQRLNSTISWHNSAPSPKSRNEDLDKSYRVS  
HRTVPGGPNPLHN\*

>SbCLE22

MKIQYPSFQSLLILVIILFVSQLSSCRKIQEITPTSIEQRLNSTSWHNSAPSPKSRNEDIDKSYRVS  
HRTVPGGPNPLHN\*

>SphCLE23

MNSLFHFIFFLFLLLLLLSTTTTDIRQPPPAPFPRPYVSSMRKQQLNFQPQASAPTIARDFESD  
MRRVPTGPNPLHNKKRKT\*

>SchCLE23

MNSLFHFIFFLFLLLLLLSTTTDIRQPPPAPFPRPYVSSMRKQQLNFQPQASAPTIARDFESD  
MRRVPTGPNPLHNKKRKT\*

>SvCLE23

MNSLFHFIFFLFLLLLLLSTTTAAIRQPPPAPFPRPYVSSMRKQQLNFQPQASAPTIARDFESDMR  
RVPTGPNPLHNKKRKT\*

>SjCLE23

MNSLFHFIFFLFLLLLLLSTTTAIRQPPPAPFPRPYVSSMRKQQLNFQPQASAPTIARDFESD  
MRRVPTGPNPLHNKKRKT\*

>ScuCLE23

MNSLFHFIFFLFLLLLLLSTIITTAIRQPPPAPFPRPYVSSMRKQQLNFQPQASAPTIARDFESDMRR  
VPTGPNPLHNKKKTX

>ScoCLE23

MNSLFHFIFFLFLFLLLLSTAAASIRQPPDPFPHPYVSSSTRKQQLNFQPQASAPTIARDFESDKR  
RVPTGPNPLHNKKRKT\*

>SbCLE23

MNSLFHFIFFLFLLLLLLSTTTAIRQPPPAPFPRPYVSSMRKQQLNFQPQASAPTIARDFESD  
MRRVPTGPNPLHNKKRKT\*

>SaCLE23

MNSLFHFIFFLFLLLLLLSTTTAIRQPPPAPFPRPYVSSMRKQQLNFQPQASAPTIARDFESD  
MRRVPTGPNPLHNKKRKT\*

>SphCLE24

MANSNSKLSLAFILLLVFANVNISIATSYRGVESIIRSKLDSKKILQEICSYLGKKISNRRVLVD  
IIDRVAPGGPDPKHH\*

>SjCLE24

MANSNSKLSLVFILLLLLNFANVNISIATSYRGVESIIRSKLDSSKKILQEICSYLGKKICNRRVLVD  
IIDRVAPGGPGPKHH\*  
>ScuCLE24  
MANSNSKLSLVFILLLLLNFANVNISIATSYRGVESIIRSKLDSSKKILQEICSYLGKKICNRRVLVD  
IIDRVAPGGPDPKHH\*  
>ScoCLE24  
MANSNSKLSLVFILLLLLNFANVNISIATSYRGVKSIIRSKLDSSKKILQEICSYLGKKICNRRVLV  
DIIDRVAPGGPDPKHH\*  
>SchCLE24  
MTNSNSKLSLAFILLLLLNFANVNISIATSYRGVESIIRSKLDSSKKILQEICSYLGKKICNRRVLVD  
IIDRVAPGGPDPKHH\*  
>SbCLE24  
MANSNSKLSLAFILLLLLNFANVNISIATSYRGVESIIRSKLDSSKKILQEICSYLGKKISNRRVLV  
DIIDRVAPGGPDPKHH\*  
>SvCLE24  
MANSNSKLSLVFILLLLLNFANVNISIATSYRGVESIIRSKLDSSKKILQEICSYLGKKICNKRLVLD  
IIDRVAPGGPDPKHH\*  
>SaCLE24  
MANSNSKLSLVFILLLLLNFANVNISIATSYRGVESIIRSKLDSSKKILQEICSYLGKKICNRRVLVD  
IIDRVAPGGPDPRHH\*  
>SaCLE25  
MANFRFLCLILIILLSCPPSES RPLGKSSQRRGETMMMETAQEIIKERLRHAIKYNVKRLSPGGPD  
PKHH\*  
>SphCLE25  
MANFRFLCLILIILLSCPPSES RPLGKSSQRRGETMMETAQEIIKERLRHAIKYNVKRLSPGGPD  
PKHH\*  
>SjCLE25  
MANFRFLCLILIILLSCPPSES RPLGQSSQRRGETITMMETAREIIKERLRHAIKYNVKRLSPGGPD  
PKHH\*  
>SchCLE25  
MANFRFLCLILIILLSCPPSES RLLGQSSQRRGETTTMMETAREIIKERLRHAIKYNVKRLSPGGP  
DPKHH\*  
>SvCLE25  
MANFRFLCLILIILLSCPPSES RPLGKSSQRRGETITMMETAREIIKERLRHAIKYNVKRLSPGGPD  
PKHH\*  
>ScoCLE25  
MANFRFLCLILIILLSCPPSES RPLGQSSRRREATITMMETAREIIKERLRHAIKYNVKRLSPGGPD  
PKHH\*  
>SbCLE25  
MANFRFLCLILIILLSCPPSES RPLGKSSQRRGETITMMETAREIIKERLRHAIKYNVKRLSPGGPD  
PKHH\*  
>ScuCLE25  
MANFRFLCLILIILLSCPPSES RPLGQSSRRREETITMMETAREIIKERLRHAIKYNVKRLSPGGPD  
PKHH\*  
>ScuCLE26  
MKAAPSSSSSSRMACKCIFLAYLIFFSFSSMASSQVQKIPYATKKHDQEDHHHSSVICYQLQRI  
RHCPPFLPPPSSSSSMDEIDPRYGVEKRLVPSGPNPLHN\*  
>SphCLE26  
MKAAPSSSSSSRMACKCIFLAYLIFFSFSSMASSQVQKIPYATKKHDQEDHHHSSVICYQLQRI  
RHCPPFLPPPSPSSSSSMDEIDPRYGVEKRLVPSGPNPLHN\*  
>SbCLE26  
MKAAPSSSSSSRMACKCIFLAYLIFFSFSSMASSQVQKIPYATKKLDQEDHHHSSVICYQLQRI  
RHCPPFLPPPSPSSSSSMDEIDPRYGVEKRLVPSGPNPLHN\*  
>SaCLE26  
MKAAPSSSSSSRMACKCIFLAYLIFFSFSSMASSQVQKIPYATKKHDQEDHHHSSVICYQLQRI  
RHCPPFLPPPSPSSSSSMDEIDPRYGVEKRLVPSGPNPLHN\*  
>SjCLE26

MKAAPFSSSSSRMACKCIFLAYLIFFSFSSMASSQVQKIPIPHSTKKHDQEDHHSSVICYQLQRI  
RHCPPFLPPSPPPSSSSSSMNEIDPRYGVEKRIVPSGPNPLHN\*  
>SchCLE26  
MKAAPFSSSSSRMACKCIFLAYLIFFSFSSMASSQVQKIPIPHSTKKHDQEDHHSSVICYQLQRI  
RHCPPFLPPSPPPSSSSSSMNEIDPRYGVEKRIVPSGPNPLHN\*  
>ScoCLE26  
MKAAPFSSSSSRMACKCIFLAYLIFFSFSTMASSTQKIPIPHSTKKHDQEDHHSSVICYQLQRIR  
HCPPFLPPSPPPSSSSSMDEIDPRYGVEKRLVPSGPNPLHN\*  
>SvCLE26  
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HCPPFLPPSPPPSSSSSMDEIDPRYGVEKRLVPSGPNPLHN\*  
>ScoCLE27  
MKAALFSSSGSRMALKCIFLAYLIFFSFSSIASTQTQKFPIQQSTKKHDQEDHLHSSVICYQVQRI  
RYCPPFLPPSPPPSSSSSMDEIDPRYGVEKRLIPSGPNPLHN\*  
>SbCLE27  
MKAALFSSSGSRMARKCIFLAYLIFFSFSSMASTQTQKFPIQQSTKKHDQEEHLHSSVICYQLQRI  
RYCPPFLPLSPPPSSSSSMDEIDPRYGVEKRLIPSGPNPLHN\*  
>SaCLE27  
MKAALFSSSGSRMAGKCIFLAYLIFFSISSIASTQTQKFPIQQSTKKHDQEDHLHSSVICYQLQRIR  
YCPPFLPPSPPPSSSSSMDEIDPRYGVEKRLIPSGPNPLHN\*  
>ScuCLE27  
MKAALFSSSGSRMAHKCIFLAYLIFFTFSMASTQTQKFPIQQSTKKHDQEDHLHSSVICYQLQR  
IRYCPPFLPPSPPPSSSSSMDEIDPRYGVEKRLIPSGPNPLHN\*  
>SjCLE27  
MKAALFSSSGSRMAHKCIFLAYLIFFTFSMASTQTQKFPIQQSTKKHDQEDHLHSSVICYQLQR  
IRYCPPFLPPSPPPSSSSSMDEIDPRYGVEKRLIPSGPNPLHN\*  
>SphCLE27  
MKAALFSSSGSRMARKCIFLAYLIFFPFYSMASTQTQKFPIQQSTKKHNQEDHLHSSVICYQLQR  
IRYCPPFFFFSPSSSLSSSMDEIDPRYGVEKRLIPSGPNPLHN\*  
>SchCLE27  
MKAALFSSSGSRMARKCIFLAYLIFFSFSSIG\*TQTQKFPIQPSTKKHDQEDHLHSSVICYQLQRIR  
YCPPFTPPSPPPSSSSSMDEIDPRYGVEKRLIPSGPNPLHN\*  
>SvCLE27  
MKAALFSSSGSRMACKCIFLAYLIVFTFSMASTQTQKFPIQQSTKKHDQEDHLHSSVICYQLQR  
IRYCPPFLPPSPSSSSSMDEIDPRYGVEKRLIPSGPNPLTTEKTEHHHFHGKKVQFLDYLVTLLGF  
HSRKIEEEEADSRMSSEFLFFVSTIY\*  
>SchCLE28  
MTIQUEENRRRIKVIIRAWTIMLIFSQLCISSIAHSPNATPRKVGFFHEVSTITSADHNVETGEKRN  
RGNKLYDEDKRLVHTGPNPLHN\*  
>SvCLE28  
MTIQUEENRRRIKVIIRAWTIMLIFSQLCISSIAHSPNATPRKIGIFHEVSTITSADHNVETGEKK  
NRGNKLYDEDKRLVHTGPNPLHN\*  
>SjCLE28  
MTIQUEENRRRRRIEVIIIRAWTIMLIFSQLCISSIAHSPNATPRKVGFFHEVSTITSADHKVETEEK  
RNNGNKLYDEDKRLVHTGPNPLHN\*  
>ScoCLE28  
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EKRNNGNKLYDEDKRLVHTGPNPLHN\*  
>SbCLE28  
MTIQUEENRRRIKVIIRAWTVMLIFSQLCISSIAHSPNATPRKVGFFHEVTTINSADHNVETGEK  
RNNGNKLYDEDKRLVHTGPNPLHN\*  
>SaCLE28  
MTIQUEENRRRIKVIIRAWTVMLIFSQLCISSIAHSPNATPRKVGFFHEVSTITSADHNVETGEKR  
NRGNKLYDEDKRLVHTGPNPLHN\*  
>ScuCLE28  
MTIQUEENRRRIKVIIRAWTVMLIFSQLCISSIAHSPNATPRKVGFFHEVSTITSADHNVETGEKR  
NRGNKLYDEDKRLVHTGPNPLHN\*

>SphCLE28  
MTIQEENRRRRRIKVII RAWTVM LISQLCISSIAHSPNATPRKVGFFHEVSTITSADHNVETGEK  
RN RGNKLYDEDKRLVHTGPNPLHN\*

>SphCLE29  
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HHNRQHPSKP\*

>SchCLE29  
MVSLRTFTVTLLIFLVFAPFVLSFHQSQQEKGGFPDEENQGERKKMGTEEDCARQIPTGPDPL  
HHNRQHPSKP\*

>SvCLE29  
MVSLRTFTVTLLIFLVFAPFVLSFHQSQQEKGGFPDEENQGERKKMGTEEDCARQIPTGPDPL  
HHNRQHPSKP\*

>SjCLE29  
MVSLRTFTVTLLIFLVFAPFVLSFHQSQQEKGGFPDEENQGERKKMGTEEDCARQIPTGPDPL  
HHNRQHPSKP\*

>ScuCLE29  
MVSLRTFTVTLLIFLVFAPFVLSFHQSQQEKGGFPDEENQGERKKMGTEEDCARQIPTGPDPL  
HHNRQHPSKP\*

>ScoCLE29  
MVSLRTFTVTLLIFFVVFAPFVLSFHQSQQEKGGFPDEENQGERKKMGTEEDCARQIPTGPDPL  
HHNRQHPSKP\*

>SbCLE29  
MVSLRTFTVTLLIFLVFAPFVLSFHQSQQEKGGFPDEENQGERKKMGTEEDCARQIPTGPDPL  
HHNRQHPSKP\*

>SaCLE29  
MVSLRTFTVTLLIFLVFAPFVLSFHQSQQEKGGFPDEENQGERKKMGTEEDCARQIPTGPDPL  
HHNRQHPSKP\*

>SphCLE30  
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PPSGPNPNGNHRPPSRAKSNWKSSTIRP\*

>SvCLE30  
MKRTELLYLLLSTICAHEYNFIPMAQAINAVKSNSKSSVFYTLRSTRGHILANLGKYEKIHKPPS  
GPNPNGNHRPPSRAKSNWKSSTIRP\*

>SjCLE30  
MKRTELLYLLLSTISAECRHEYNFIPMAQAINAVKSNSKSSVFYTLRSTRGHILANLGKYEKIHK  
PPSGPNPNGNHRPPLRTKSNWKSSTIRP\*

>ScoCLE30  
MKRTELLYLLLSTICAECRHEYNFIPMAQAINAVKSNSKRSVFYTLRSTRGHILANLGKYEKIHK  
PPSGPNPNGNHRPPSRAKSNWKSSTIRP\*

>SbCLE30  
MKRTELLYLLLSTICAECRHEYNFIPMAQAINAVKSNSKSSVFYTLRSTRGHILANLGKYEKIHK  
PPSGPNPNGNHRPPSTAKSNWKSSTIRP\*

>SchCLE30  
MKRTELLYLLLSTISAECRHEYNFIPMAQAIKAGKSNSKSSVFYTLRSTRGHILANLGKYEKIHK  
PPSGPNPNGNHRPPSRAKSNWKSSTIRP\*

>ScuCLE30  
MKRTELLYLLLSTISAECRHEYNFIPMAQAIKAGKSNSKNSVFYTLRSTRGHILANLGKYEKIHK  
PPSGPNPNGNHRPPSRAKSNWKSSTIRP\*

>SaCLE30  
MKRTELLYLLLSTISAECRHEYNFIPMAQAIKAGKSNSKSSVFYTLRSTRGHILANLGKYEKIHK  
PPSGPNPNGNHRPPSRAKSNWKSSTIRP\*

>SchCLE31  
MKPPTSLLLLVLILILVLAFCYADCRHLSAAYQSEKLRGSKNFVSVHAGAADHVVPGGPNPL  
HN\*

>SvCLE31  
MKPPTSLLLLVLILILVLAFRYADCRHLSAAYQSEKLRGSKNFVSVHAGAADHVVPGGPNPL  
HN\*

>ScoCLE31  
MKPPTSLLLLVLILVLVAFRYADCRHLSAAYQSEKLRGSKNFVSVHAGAADHVVPGGPNPL  
HN\*  
>SbCLE31  
MKPPTSLLLLVLILVLVAFCYADCRHISAAYQSEKLRGSKNFVSVHAGAADHVVPGGPNPLH  
N\*  
>SaCLE31  
MKPPTSLLLLVLILVLVAFRYADCRHLSAAYQSEKLRGSKNFVSVHAGAADHVVPGGPNPL  
HN\*  
>SphCLE31  
MKPPTSLLLLVLILVLVAFRYTDCRHLSAAYQSEKLRGSKFVSVHAGAADHVVPGGPNPLH  
\*  
>SjCLE31  
MKPPTSLLLLVLVLILVLVASRYADCRHLSAAYQSKNLRGSKFVSVHAGAADHVVPGGPNPLH  
N\*  
>ScuCLE31  
MKPPTSLLLLVLVLILVLVASRYADCRHLSAAYQSKNLRGSKFVSVHAGAADHVVPGGPNPLH  
N\*  
>SphCLE32  
MGKSTLFIKSQTLLPLFFLGLLLNSWMISATRPIDFSGHDLDSLSNEKSTIIVNHPPKILTDQQY  
MVNAHDVPSGANPIQNGCENGIC\*  
>SchCLE32  
MGKSTLFIKSQTLLPLFFLGLLLNSWMILATRPIDFSGHDSDSLSSNEKSTIIVNHPPKISSDQQY  
MVNAHDVPSGANPIQNGCENGIC\*  
>SvCLE32  
MGKSTLFIKSQTLLPLFFLGLLLNSWMISATRPIDFSGHDSDSLSSNEKFTIIVNHPPKISSDQQY  
MVNAHDVPSGANPIQNGCENGIC\*  
>SjCLE32  
MGKSTLFIKSQTLLPLFFLGLLLNSWMISATRPIDFSGHDSDSLSSNEKSTIIVNHPPKILTDQQY  
MVNAHDVPSGANPIQNGCENGIC\*  
>ScuCLE32  
MGKSTLFIKSQTLLPLFFLGLLLNSWMISATRPIDFSGHDLDSLSNEKSTIIVNHPPKILTDQQY  
MVNAHDVPSGANPIQNGCENGIC\*  
>ScoCLE32  
MGKSTLFIKSQTLLPLFFLGLLLNSWMISATRPIDFSRHDDSLSSNEKFTIIVNHPPKISSDQQY  
MVNAHDVPSGANPIQNGCENGIC\*  
>SbCLE32  
MGKSTLFIKSQTLLPLFFLGLLLNSWMISATRPIDLGHDSDSLSSNEKFTIIVNHPPKISSDQQY  
MVNAHDVPSGANPIQNGCENGIC\*  
>SaCLE32  
MGKSTLFIKSQTLLPLFFLGLLLNSWMISATRPIDFSGHDLDSLSNEKSTIIVNHPPKILTDQQY  
MVNAHDVPSGANPIQNGCENGIC\*  
>SphCLE33  
MISLFHHFFFIVLFTSPRVHVIHLQQARFSGPSRKVSIFQPLPTSFKFENRRVPTGSNPLHNKKR\*  
>SchCLE33  
MISLFHHFFFIVLFTSPRVHVIHLQQARFSGPSRKVSIFQPLPTSFKFENRRVPTGSNPLHNKKR\*  
>SvCLE33  
MISLFHHFFFIVLFASPRVHVIHLQPAQFSGPSRKVSIVQPLPTSFKFENRRVPTGSNPLHNKKR\*  
>SjCLE33  
MISLFHHFFFIVLFTSPRVHVIHLQPARFSGPSRKVSIFQPLPTSFKFENRRVPTGSNPLHNKKR\*  
>ScuCLE33  
MISLFHHFFFIVLFTSPRVHVIHLQPARFSGPSRKESVIFQPFPSTSFKFENRRVPTGSNPLHNKKR\*  
>ScoCLE33  
MISLFHHFFFIVLFTSPRVHVIHLQPVRFGSPSPRKVSIFQPLPTSFKFENRRVPTGSNPLHNKKR\*  
>SbCLE33  
MISLFHHFFFIVLFTSPRVHVIHLQQARFSGPSRKVSIFQPLPTSFKFENRRVPTGSNPLHNKKR\*  
>SaCLE33

MISLFHHFFFIVLFTSPRVHVIHLQQARFSGPSRKVSVIFQPLPTSKFENRRVPTGSNPLHNKKR\*  
>ScuCLE34  
MASFKFWFCFFVILLSCLCSESRRPLEAFSGKRKETMMEIARNILRERLLKARSIKYDVNRRLSPGGP  
DPKHH\*  
>SphCLE34  
MASFKFWFCFFVILLSCLCSESRRPLEAFSGKRKETMMEIARNILRERLLKARSIKYDVNRRLSPGGP  
DPKHH\*  
>SchCLE34  
MASFKFWFCFFVILLSCLCSESRRPLEAFSGKRKETMMEIARNILRERLLKARSIKYDVNRRLSPGGP  
DPKHH\*  
>SvCLE34  
MASFKFWFCFFVILLSCLCSESRRPLEAFSGKRKETMMEIARNILRERLLKARSIKYDVNRRLSPGGP  
DPKHH\*  
>SjCLE34  
MASFKFWFCFFVILLSCLCSESRRPLEAFSGKRKETMMEIARNILRERLLKARSIKYDVNRRLSPGGP  
DPKHH\*  
>ScoCLE34  
MASFKFWFCFFVILLSCLCSESRRPLEAFSGKRKETMMEIARNILREQLLKARSIKYDVNRRLSPGGP  
DPKHH\*  
>SbCLE34  
MASFKFWFCFFVILLSCLCSESRRPLEAFSGKRKETMMEIA\*NILRERLLKARSIKYDVNRRLSPGGP  
DPKHH\*  
>SaCLE34  
MASFKFWFCFFVILLSCLCSESRRPLEAFSGKRKETMMEIARNILREQLLKARSIKNDVNRLSPGGP  
DPKHH\*  
>SphCLE35  
MEKSTLLPLIFLGLLLNPWMILATRSVDFPDHNTLSSNEKSTIIVNHPNKISSDQQYMFHDV  
PSGPNIHDCGDNIC\*  
>SchCLE35  
MEKSTLLPLIFLGLLLNPWMILATRSVDFPDHNTLSSNEKSTIIVNHPNLSSDQQYMFHDV  
PSGPNIHDCGDDIC\*  
>SvCLE35  
MEKSTLLPLIFLGLLLNPWMILATRSVDFPDHNTLSSNEKSTIIVNHPNVSSDQQYMFHDV  
VPSGPNIHDCGDDIC\*  
>SjCLE35  
MEKSTLLPLIFLGLLLNPWMILATRSVDFPDHNTLSSNEKSTIIVNHPNKISNDQQYMFHDV  
PSGPNIHDCGDDIC\*  
>ScuCLE35  
MEKSTLLPLIFLGLLLNPWMILATRSVDFPDHNTLSSNEKSTIIVNHPNKISSDQQYMFHDV  
PSGPNIHDCGDDIC\*  
>ScoCLE35  
MEKSTLLPLIFLGLLLNPWMISATRSVDFSDHNTLSSNEKSTIIVNHPNKISSDQQYMFHDV  
PSGPNIHDCGDDIC\*  
>SbCLE35  
MEKSTLLPLIFLGLLLNPWMILATRSVDFPDHNTLSSNEKSTIIVNHPNKISSDQQYMFHDV  
PSGPNIHDCGDNIC\*  
>SaCLE35  
MEKSTLLPLIFLGLLLNPWMILATRSVDFPDHNTLSSNEKSTIIVNHPNKISSDQQYMFHDV  
PSGPNIHDCGDDIC\*  
>SphCLE36  
MASSIRFWLCFILILLSCPLFESRPLEPFTSKRKETTMMETAREIIRERMSHAIKYDVKRLSPRGPNP  
KHH\*  
>SchCLE36  
MASSIRFWLCFILILLSCPRFESRPLEPFTSKRKETTMMETAREIIRERMSHAIKYEVKRLSPRGPNP  
KHH\*  
>SvCLE36

MASSIRFWLCFILILLSCPRFESRPLEPFTSKRKETTMMETAREIIRERMSHAIKYDVKRLSPRGPNP  
KHH\*  
>SjCLE36  
MASSIRFWLCFILILLSCPRFESRPLEPFTSKRKETTMMETAREIIRERMSHAIKYEVKRLSPRGPNP  
KHH\*  
>ScoCLE36  
MASSIRFWLCFILILLSCPRFESRPLEPFTSKRKETTMMETAREIIRERMSHAIKYDVKRLSPRGPNP  
KHH\*  
>SbCLE36  
MASSIRFWLCFILILLSCPRFESRPLEPFTSKRKETTMMETAQEIIERERMSHAIKYDVKRLSPRGPNP  
KHH\*  
>SaCLE36  
MASSIRFWLCFILILLSCPLFESRPLEPFTSKRKETTMMETAREIIRERMSHAIKYDVKRLSPRGPNP  
KHH\*  
>ScuCLE36  
MASSIRFWLCFILILLSCPLFESRPLEPFTSKRKETTMMETAREIIRERMSHAIKYDVKRLSPRGPNP  
KHH\*  
>SphCLE37  
MKAQYPSVPILLIMAILIMSQFSSCHNIQRMTTTKQTYRDLDYSWHLASADPKTSRNEDIK  
QSYRVSNHAVPGGPNPLHN\*  
>SchCLE37  
MKAQYPSVPILLIMVILIMSQFSSCHNIQRMTTTKQTYRDLDYSWHLASADPKTSRNEDIK  
QSYRVSNHAVPGGPNPLHN\*  
>SvCLE37  
MKAQYPSVPILLIMVILSQFSSCHNIQKMTTRTKQTYRDLDYSWHLASADPKTSRNEDIE  
QSYRVSNHAVPGGPNPLHN\*  
>SjCLE37  
MKAQYPSVPILLIMAILIMSQFSSCHNIQRMTTTKQTYRDLDYSWHLASADPKTSRNEDIK  
QSYRVSNHAVPGGPNPLHN\*  
>ScuCLE37  
MKAQYPSVPTLLLIMVILSQFSSCHNIQKMTTSTKQTYRDLDYSWHLASADPKTSRNEDIE  
QSYRVSNHAVPGGPNPLHN\*  
>ScoCLE37  
MKAQYPSVPILLIMVILSQFSSCHNIQKMTTRTKQTYRDLDYSWHLASADPKTSRNEDIE  
QSYRVSNHAVPGGPNPLHN\*  
>SbCLE37  
MKAQYPSVPILLIMVMLIMSQFSSCHNIQRMTTTKQTYRHLDSDYSWHLASADPKTSRNEDIE  
QSYRVSNHAVPGGPNPLHN\*  
>SaCLE37  
MKVQYPSVPFLPIMVILSQFSSCHNVQKITTSTKQTYRDLDYSWHLASADPKTSRNEDIEQS  
YRVSNHAVPGGPNPLHN\*  
>SvCLE38  
MNHKKQKSTHLKQNHIIFSFIMNNFHFFMFVVVLLNTSVEVGAIRNENISVNSLKIKEIYRSRV  
ELTTSKNLKASMRSAPGGPNPQHHPPRSKYAPNKFGYTQTQYDKELTF\*  
>ScoCLE38  
MNHKKQKSTHLKQNHIIFSFIMNNFHFFMFVVVLLNTSVEVGAIRNENISVNSLKIKEIYRSLV  
ELTTSKNLKASMRSAPGGPNPQHHPPRSKYAPNKFGYTQTQYDKELTF\*  
>SjCLE38  
MNHKKQKSTHLKQNHIIFSFIMNNFHFFMFVVVLLNTSVEVGAIRNENISVNSLKIKEIYRSLV  
ELTTSKNLKASMRSAPGGPNPQHHPPRSKYAPNKFGYTQTQYDKELTF\*  
>ScuCLE38  
MNHKKQKSTHLKQNHIIFSFIMNNFHFFMFVVVLLNTSVEVGAIRNENISVNSLKIKEIYRSLV  
ELTTSKNLKASMRSAPGGPNPQHHPPRSKYAPNKFGYTQTQYDKELTF\*  
>SbCLE38  
MNHKKQKSTHLKQNHIIFSFIMNNFHFFMFVVVLLNTSVEVGAIRNENISVNSLKIKEIYRSLV  
ELTTSKNLKASMRSAPGGPNPQHHPPRSKYAPNKFGYTQTQYDKELTF\*  
>SchCLE38

MNHKKQKSTHLKQNHIIFSFIMNNFHFFMFVVVLLNTSVEVGAIRNENISVNSLKIKEIYRSLV  
ELTTSKNLKASMRSAPGGPNPQHHPRSKYAPNKFGYTQTQYDKELETF\*

>SphCLE38

MNHKKQKSTHLKKNHIIFSFIMNNFHFFMFVVVLLNTSVEVGAIRNENISVNSLKIKEIYRSLV  
ELTTSKNLKASMRSAPGGPNPQHHPRSKYAPNKFGYTQTQYDKELETF\*

>SaCLE38

MNHKKQKSTHLKKNHIIFSFIMNNFHFFMFVVVLLNTSVEVGAIRNENISVNSLKVKEIYRSLV  
ELTTSKNLKASMRSAPGGPNPQHHPRSKYAPNKFGYTQTQYDKELETF\*

>SaCLE39

MTSKKMLTILSFLCLLMGVLHYKVPFCGANIGKFYRFKGDYSINKRGYVKSHNKGSSSRGINN  
IPNMDEIFGDDKRKVRTGPNPLHNK\*

>SbCLE39

MTSKKMLTILSFLCLLMGVLHYKVPFCGANIGKFYRFKGDYSINKRGYAKSHNKGSSSRGINN  
IPNMDEIFGDDKRKVRTGPNPLHNK\*

>ScoCLE39

MTSKKMLTILSFLCLLMGVLHYKVPFCGANIGKFYRFKGDYSINKRGYVKSHNKGSSSRGINN  
IPNMDEIFGDDKRKVRTGPNPLHNK\*

>ScuCLE39

MTSKKMLTILSFLCLLMGVLHYKVPFCGANIGKFYRFKGDYSINKRGYVKSHNKGSSSRGINN  
IPNMDEIFGDDKRKVRTGPNPLHNK\*

>SjCLE39

MTSKKMLTILSFLCLLMGVLHYKVPFCGANIGKFYRFKGDYSINKRGYVKSHNKGSSSRGINN  
IPNMDEIFGDDKRKVRTGPNPLHNK\*

>SvCLE39

MTSKKMLTILSFLCLLMGVLHYKVPFCGANIGKFYRFKGDYSINKRGYVKSHNKGSSSRGINN  
IPNMDEIFGDDKRKVRTGPNPLHNK\*

>SchCLE39

MTSKKMLTILSFLCLLMGVLHYKVPFCGANIGKFYRFKGDYSINKRGYVKSHNKGSSSRGINN  
IPNMDEIFGDDKRKVRTGPNPLHNK\*

>SphCLE39

MTSKKMLTILSFLCLLMGVLHYKVPFCGANIGKFYRFKGDYSINKRGYVKSHNKGSSSRGINN  
IPNMDEIFGDDKRKVRTGPNPLHNK\*

>SphCLE40

MSNFNLVSVILLNTSVEVASIRIENISTKSLKVKEIFLSLVKLTFQSMRTVPTGPNPLHNVTP  
PDSQNTPNTFATLKPNATKS\*

>SchCLE40

MSNFNLVSVVLLNTLVEVASIRIENISTKSLKVKEIFRSLVKLTFQSMRIVPTGPNPLHNVTP  
PDSQNTPNTFTTLKPNATKS\*

>SvCLE40

MSNFNLVSVVLLNTSVEVAIRIENISTKSLKVKEIFRSLIKLTFQSMRTVPTGPNPLHNVTP  
PDSQNTPNTFATLKPNATKS\*

>ScuCLE40

MSNFNLVSVVILLNTSVEVASIRIENISTKSLKVKEIFRSLMKLTFQSMRTVPTGPNPLHNVTP  
PDSQNTPNTFATLKPNATKS\*

>ScoCLE40

MSNFNLVSVVLLFLNTSVEVAIRIENISTKSLKVKEIFRSLMKLTFQSMRTVPT\*LNPLHNVTP  
SPDSQNTPNTFATLKPNATKS\*

>SbCLE40

MSNFNLVSVVLLNTSIEVASIRIENISTKSFKVKEIFRSLMKLTFQSMRTVPTGPNPLHNVTP  
PDSQNTPNTFATLKPNATKS\*

>SaCLE40

MSNFNLVSVVLLNTSVEVAIRIENISTKSLKVKEIFRSLMKLTFQSMRTVPTGPNPLHNVTP  
PPNSQNTPNTFATLKPNATKS\*

>SaCLE41

MKMSQGKLYICVIMVLIIMMQCTEARILRPKKVMLFEFFKNVTRGVLDPLKIMHFRKIRYEYDNT  
FKESEQRKKKKLTEPFRVLFESKKVDKSQERKYKLMRNSPGDPKHH\*

>SbCLE41

MKMSQGKLYICVIMVLIMMQCTEARILRLKKVMLFEFFKNVTRGVLDPLKIMHFRKIRYEYDN  
TFKEFEQRKKKKLTEPFRVLFESKKVDKSQERKYKLMRNSPGGPDPKHH\*  
>ScoCLE41  
MKMSQGKLYICVIMVLIMMQCTEARILRQKKIMLFELFKNVTRGMLDPLKIMHFRKIHYEYDN  
TLKESEQRKKKLTEPFRILFESKKVDKSQERKYKLMRNSPGGPDPKHH\*  
>ScuCLE41  
MKMSQGKLYICVIMVLIMMQCTEARILRQKKIMLFELFKNVTRGMLDPLKIMHFRKIHYEYDN  
TFKESEQRKKKLTEPFRILFESKKVDKSQERKYKLMRNSPGGPDPKHH\*  
>SjCLE41  
MKMSQGKLYICVIMVLIMMQCTEARILRQKKIMLFELFKNVTRGMLDPLKIMHFRKIHYEYDN  
TFKESEQRKKKLTEPFRILFESKKVDKSQERKYKLMRNSPGGPDPKHH\*  
>SvCLE41  
MKMSQGKLYICVIVVLIMMQCTEARILRPKKIMLFELFKNITRGMLDPLKIMHFRKIRYEYDNTF  
KESEQRKKKLTEPFRVLFESKKVDKSQERKYKLMRNSPGGPDPKHH\*  
>SchCLE41  
MKMSQGKLYICVIMVLIMMQCTEARILRPKKVMLFEFFKNVTRGVLDPLKIMHFRKIRYEYDNTF  
FKESEQRKKKLTEPFRVLFESKKVDKSQERKYKLMRNSPGGPDPKHH\*  
>SphCLE41  
MKMSQGKLYICVIMVLIMMQCTEARILRPKKVMLFEFFKNVTRGVLDPLKIMHFRKIRYEYDNTF  
FKESEQRKKKLTEPFRVLFESKKVDKSQERKYKLMRNSPGGPDPKHH\*  
>SaCLE42  
MAKSNFLSSILVLVLLMFFSQVSFSVARAATSYRGVENMRKKIDSQQILRELLVNDLGKKMKQ  
NYRRVMMNKDRVAPGGPDPQHHY\*  
>SbCLE42  
MAKSSFMLSSILVLVLLMFFSRVRSVARAATSYRGVENMRKKIDSQQILRELLVNDLGKKMKQ  
NYRRVMMNKDRVAPGGPDPQHHY\*  
>SchCLE42  
MVKSSFMLSSILVLVLLMFFSQVSFSVARASTSYRGVENMRKKIDSQILRELLVNDLGKKMKQ  
NYRRVMMNKDRVAPGGPDPQHHY\*  
>ScoCLE42  
MAKSNFLSSILVLVLLMFFSQSFVARAATSYRGVENMRKKIDSQILRELLVNDLGKKMKQ  
NYRRVTMNKDRVAPGGPDPQHHY\*  
>ScuCLE42  
MVKSSFMLSSILVLVLLMFFSQVSFSVARASTSYRGVENMRKKIDSQILRELLVNDLGKKMKQ  
NYRRVMMNKDRVAPGGPDPQHHY\*  
>SjCLE42  
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NYRRVMMNKDRVAPGGPDPQHHY\*  
>SvCLE42  
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NYRRVMMNKDRVAPGGPDPQHHY\*