| Homo_sapiens Gallus_gallus Xenopus_laevis Xenopus_tropicalis Callithrix_jacchus Oryctolagus_cuniculus Bos_taurus Rattus_norvegicus Mus_musculus Macaca_mulatta Monodelphis_domestica Canis_familiaris Taeniopygia_guttata Danio_rerio | 1 1 1 1 1 1 1 1 1 1 | MAAGAGTAGPASGPGVVRDPAASQPRKRPGREGG EGARRSDTMAGGGGSSDGSGRAAGRRASRSSGRARRGRHEPGLGGPAERGAGEARLEEAVNRWVLKFYFHEAL MAAKR SRAAMEEQEKTSTRSDDREQAVNRWVLKFYFHEAL ME. SNSTLR ECGSPDPCIQLERTINQWAFDY FHTAV ME. TNSTLE ERRSPDSCKQLERTINQWVFDY FHTAV GLGDVDFKPQEALRPAQRELRRPRGPGPPVLSIPEARGRLEAVNRWVLKFYFHEAL MAAGAGTAGPASGPGVVRDPAASQPRKRPSRGGG EGARRSDAMAGGGGSSDSGRAAGRRASRSGGRARRGRHEPGLGGPAGRAGEARLEEAVNRWVLKFYFHEAL MAAGAGTAGSASGPGVVRDPAASQSRKRPGREGG EGARRSDAMAGGGGSSDSGRAAGRRASRSGGRARRGRHEPGLGGAAERGAGEVRLEEAVNRWVLKFYFHEAL MAAGAGTAGPASGPGVVRDPAASQSRKRPGREGG EGARRSDAMAGGGGSSDSGRAAGRRASRSGGRARRGRHEPGLGGAAERGAGEVRLEEAVNRWVLKFYFHEAL MAGGGGSSDNGGRAANRRASRSGGRARRGRHEPGLGGAAERGAGEARLEEAVNRWVLKFYFHEAL MAAGAGTAGPASGPGVVRDPMASQPRKRPSREGGEGGEGRSNTMAGGGGSSDSGRAAGRRASRSSGRARRGRHEPGLGGAAERGAGEARLEEAVNRWVLKFYFHEAL MAGGGGSSDSGGSGRAAGRRASRSSGRARRGRHEPGLGGAAERGAGEARLEEAVNRWVLKFYFHEAL MAGGGGSSDGSGRAAGRRASRSSGRARRGRHEPGLGGAAERGAGEARLEEAVNRWVLKFYFHEAL MAGGGGSSDGSGRAAGRRASRSSGRARRGRHEPGLGGAAERGAGEARLEEAVNRWVLKFYFHEAL MAGGGGSSDGSGRAAGRRASRSSGRARRGREGLGGAGEARLEEAVNRWVLKFYFHEAL MAGGGGSSDGSGRAAGRRASRSGGRARRGREGLGGAAERGAGEARLEEAVNRWVLKFYFHEAL MAGGGGSSDGSGRAAGRRASRSGGRARRGREGLGGAGEARLEEAVNRWVLKFYFHEAL MAGGGGSSDGSGRAAGRRASRSGGRARRGREGPGLGGAAERGAGEARLEEAVNRWVLKFYFHEAL MAGGGGSSDGSGRAAGRRASRSGGRARRGREPGLGGAAERGAGEARLEEAVNRWVLKFYFHEAL MAGGGGSSDGSGRAAGRRASRSGGRARRGREPGLGGAAERGAGEARLEEAVNRWVLKFYFHEAL MAGGGGSSDGSGRAAGRRASRSGGRARRGREPGLGGAAERGAGEARLEEAVNRWVLKFYFHEAL MAGGGGSSDGSGRAAGRRASRSGGRARRGREPGLGGAAERGAGEARLEEAVNRWVLKFYFHEAL MAGGGGSSDGSGRAAGRRASRSGGRARRGREPGLGGAAERGAGEARLEEAVNRWVLKFYFHEAL MAGGGGSSDGSGRAAGRRASRSGGRARGREPGLGGAAERGAGEARLEEAVNRWVLKFYFHEAL MAGGGGSSDGSGRAAGRRASRSGGRARGREPGLGGAAERGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA |
|---|--|--|
| Homo_sapiens Gallus_gallus Xenopus_taevis Xenopus_tropicalis Callithrix_jacchus Oryctolagus_cuniculus Bos_taurus Rattus_norvegicus Mus_musculus Macaca_mulatta Monodelphis_domestica Canis_familiaris Taeniopygia_guttata Danio_rerio | 108 41 37 37 63 107 108 66 111 66 36 62 28 | RAFRGSRYGDERQIRDIMQALLVRELGKEHTVSRLLRVMQCLSRIEEGENLDCSFDMEAELTPLESAINVLEMIKTEFTLTEAVVESSRKLVKEAAVIICIKNKEFEKAS AAYRAGRNRDERQLRDVMQALLVRELGREPAVAQMLRVMQFISRIEEGENLDCTFDKETELTPLESAIGILQLAKKEFSVPEKKIELIHKVLKEAAVIVCIKNKEFSKAL EAFRSDRENDE QEIRDIVSVLLLHELETKAQNDCKLRIMQCISRIEEGGEDPDCTFNDNNETPLESAVGLLDIIQDEMPLDEDLFKTNKQMVKBAAVLVCIKKSKEDOAI EAFRGSRKGDERQIRDIMVSVLLHHELEIKAQNDCKLRIMQCISRIEEGEDPDCTFNDENNETPLESAVGLLDIIQDKEMPLDEDLLFKTNKQMVKBAAVLVCIKSQKFDOAI RAFRGSRYGDERQIRDIMQALLVRELGKEHTVSRLLRVMQCLSRIEEGENLDCSFDMEAELTPLESAINVLEMIKTEFTLTEAVVESSRKLVKBAAVIICIKNKEFEKAS RAFRGSRYGDERQIRDIMQALLVRELGKEHTVSRLLRVMQCLSRIEEGENLDCSFDMEAELTPLESAINVLEMIKTEFTLTEAVVIESSRKLVKBAAVIICIKNKEFEKAS RAFRGSRYGDERQIRDIMQALLVRELGKEHTVSRLLRVMQCLSRIEEGENLDCSFDMEAELTPLESAINVLEMIKTEFTLTEAVVIESSRKLVKBAAVIICIKNKEFEKAS RAFRSSRYRDERQIRDIMQALLVRELGKEHTVSRLLRVMQCLSRIEEGENLDCSFDMEAELTPLESAINVLEMIKTEFTLTEAVVIESSRKLVKBAAVIICIKNKEFEKAS RAFRSSRYRDERQIRDIMQALLVRELGKEHTVSRLLRVMQCLSRIEEGENLDCSFDMEAELTPLESAINVLEMIKTEFTLTEAVVIESSRKLVKBAAVIICIKNKEFEKAS RAFRSSRYRDERQIRDIMQALLVRELGKEHTVSRLLRVMQCLSRIEEGENLDCSFDMEAELTPLESAINVLEMIKTEFTLTDSMVESSRKLVKBAAVIICIKNKEFEKAS RAFRGSRYGDERQIRDIMQALLVRELGKEHTVSRLLRVMQCLSRIEEGENLDCSFDMEAELTPLESAINVLEMIKTEFTLTDSMVESSRKLVKBAAVIICIKNKEFEKAS RAFRGSRYGDERQIRDIMQALLVRELGKEHTVSRLLRVMQCLSRIEEGENLDCSFDMEAELTPLESAINVLEMIKTEFTLTEAVVESSRKLVKBAAVIICIKNKEFEKAS RAFRGSRYGDERQIRDIMQALLVRELGKEHTVSRLLRVMQCLSRIEEGENLDCSFDMEAELTPLESAINVLEMIKTEFTLTEAVVESSRKLVKBAAVIICIKNKEFEKAS RAFRGSRYGDERQIRDIMQALLVRELGKEHTVSRLLRVMQCLSRIEEGENLDCSFDMEAELTPLESAINVLEMIKTEFTLTEAVVESSRKLVKBAAVIICIKNKEFEKAS RAFRGSRYGDERQIRDIMQALLVRELGKEHTVSRLLRVMQCLSRIEEGENLDCSFDMEAELTPLESAINVLEMIKTEFTLTEAVVESSRKLVKBAAVIICIKNKEFEKAS RAFRGSRYGDERQIRDIMQALLVRELGKEHTVSRLLRVMQCLSRIEEGENLDCSFDMEAELTPLESAINVLEMIKTEFTLTEAVVESSRKLVKBAAVIICIKNKEFEKAS RAFRGSRYGDERQIRDIMQALLVRELGKEHTVSRLLRVMQCLSRIEEGENLDCSFDMEAELTPLESAINVLEMIKTEFTLTEAVVESSRKLVKBAAVIICIKNKEFEKAS RAFRGSRYGDERQIRDIMQALLVRELGKEHTVSRLLRVMQCLSRIEEGENLDCSFDMEAELTPLESAINVLEMIKTEFTLTEAVVESSRKLVKBAAVIICIKNKEFEKAS RAFRGSRYGDERQURDIMQALLVRELGKEHTVSRLLRVMQ |
| Homo_sapiens Gallus_gallus Xenopus_laevis Xenopus_tropicalis Callithrix_jacchus Oryctolagus_cuniculus Bos_taurus Rattus_norvegicus Mus_musculus Macaca_mulatta Monodelphis_domestica Canis_familiaris Taeniopygia_guttata Danio_rerio | 218 176 221 176 | KILKKHMSKDPTTQKLRNDLLNITREKNLAHPVIQNFSYETFQQKMLRFLESHLDDAERYMLTMAKKALKSESAA.S.STG. AVLKRHMEKDTGNQKKRTELQTI REKNRAHPLIRDFSYVNFQQYMFQFLKTYVDTSEDLDVTMMKSLNSERAEEPKR.S.SVTP.ESPSRTEDQE.EAY RILKKYISNY.SKRKLRAELHTITREKNQNHPLITNFSFTTIKKMIYQLFEKHIDVTDPTLITAKKEQKSQCLSKDP.QTPTTE. RILKKYISNN.NKRKLRSDLQTI REKNQNHPLIANFSFTTIKKMIYQLFEKHIDVTDPTLITAKKEQKSQCLSKDP.QTPPTE. KILKKHMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDAEPYDLTMAKKALKSESAA.S.STV. KILKKHMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDTERYDLTMAKKALKSESAA.S.STV. KILKKHMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDTERYDLTMAKKALKSESAA.S.STV. KILKKHMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDTERYDLTMAKKALKSESAA.S.STV. KILKKYMSKDPTTQKVRTDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDTERYDLTMAKKALKSESAA.S.STM. KILKKYMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYEVFQQKMLRFLESHLDDTERYDLTMAKKALKSESAA.S.STM. KILKKHMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDTERYDLTMAKKALKSESAA.S.STM. KILKKHMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDTERYDLTMAKKALKSESAA.S.STM. KILKKHMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDTERYDLTMAKKALKSESAA.S.STM. KILKKHMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDTERYDLTMAKKALKSESAA.S.STM. KILKKHMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDTERYDLTMAKKALKSESAA.S.SPG KILKKHMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDTERYDLTMAKKALKSESAS.SPG KILKKHMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDTAERYDLTMAKKALKSESAS.S.SPG KILKKHMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDTAERYDLTMAKKALKSESAS.S.SPG KILKKHMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDAERYDLTMAKKALKSESAS.S.S KILKKHMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDAERYDLTMAKALKSESAS.S.S KILKKHMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDAERYDLTMAKRALKSESAS.S.S KILKKHMSKDPTTQKLRNDLLNI REKNLAHPVIQNFSYETFQQKMLRFLESHLDDAERYDLTMAKRALKSESAS.S.S |

| Homo_sapiens Gallus_gallus Xenopus_laevis Xenopus_tropicalis Callithrix_jacchus Oryctolagus_cuniculus Bos_taurus Rattus_norvegicus Mus_musculus Macaca_mulatta Monodelphis_domestica Canis_familiaris Taeniopygia_guttata Danio_rerio | 297 247 230 252 296 297 255 300 255 224 255 207 245 | |
|---|---|--|
| Homo_sapiens Gallus_gallus Xenopus_laevis Xenopus_tropicalis Callithrix_jacchus Oryctolagus_cuniculus Bos_taurus Rattus_norvegicus Mus_musculus Macaca_mulatta Monodelphis_domestica Canis_familiaris Taeniopygia_guttata Danio_rerio | 305 335 232 232 260 306 261 306 228 263 215 311 | QTTLH L QNESPRSRTTSQ L QNESPRSGPVEKP. PRE.PEPVAKP. PRE.P |
| Homo_sapiens Gallus_gallus Xenopus_laevis Xenopus_tropicalis Callithrix_jacchus Oryctolagus_cuniculus Bos_taurus Rattus_norvegicus Mus_musculus Macaca_mulatta Monodelphis_domestica Canis_familiaris Taeniopygia_guttata Danio_rerio | 315 445 245 270 314 316 271 316 273 238 273 231 320 | |

| | | | • |
|-----------------------|-----|---|---------|
| Homo_sapiens | 376 | DENESSAPADGEGGSELQP.KNKRMTISRLVLEEDSQSTEPSAGLNSSQEAASAPPSKPTVLNQPLPGEKNPF | KVPKGKW |
| Gallus_gallus | 552 | KNQG SET. . .LDSP EIP HK SKRL FTISKMIMD QGSQ C SKS SESPD SSQER V VSSA YRP V Q.ELP DQP VST. . .K | RSSQQRW |
| Xenopus_laevis | 303 | | |
| Xenopus_tropicalis | 303 | | RKLNSML |
| Callithrix_jacchus | 333 | DDENGS S AP AEGEGGS ELQL,KNKRMTISRLVLEKDSQV TEP STGLS SSQEAV PAPP SKP TVLNQP LPGEKNP F | |
| Oryctolagus_cuniculus | 375 | DDENESISAPAEGEGSSELQP.KSKRMTISRLILEEDSQSTEPISTGLTSSQEAVPASPPKPTALNQPRPREISLF | |
| Bos_taurus | 378 | DIDNES SAP TEGEGGS ELQP.KTKRMTISRLVLEEDSQ S TEP S SGLD SSQE VTPASP SKP TVLNQP LPGEKNP | KVTKGKW |
| Rattus_norvegicus | 332 | DDENESSAPAEGEGGSERQP.RNNRMTISRLVLEEDSQSSEPSPDLNSSRQALSASPSKPRALNQPHTGEKNPF | |
| Mus_musculus | 378 | DEHESAAPAEGEGGGSDRQP.RNSPMTISRLLLEEDSQSTEPSPGLNSSHKAMSASKPRALNQPHPGEKKPF | KASKDKW |
| Macaca_mulatta | 334 | DIDNESSAPAEGEGGSELQP,KNKRMTISRLVLEEDSQSTEPSAGLNSSQEAAPAPPSKPTVLNQPLPGEKNPF | KVPKGKW |
| Monodelphis_domestica | 298 | ESISPISDIS AD USELLOP, KNKRMTI SRLVLEHD SOLISE QISD SPOLS SQETLIVSSASN SITVLKLHNOPLSGEKISHK | |
| Canis_familiaris | 334 | DDENESSAPAEGEGGSELQP.KNKRMTISRLVLEEDSQSTEPSASLDSSQEVVPASPSKPTVLNQPLPGEKNPF | |
| Taeniopygia_guttata | 292 | VIENQASET. SQPPEMPHNIKNLFSISNLIMELDSSSSSKSSECPDSSQEHVVSSASKPAPLKLPEEPLA | AQRRW |
| Danio_rerio | 407 | HPSNPRSSTRKKTPSRRRIJESSDS <mark>ENEQTTPAA</mark> ATHTPRGQ <mark>QQQ</mark> HRS <mark>IRVS</mark> SG <mark>SE</mark> PE <mark>V</mark> DS <mark>TSP</mark> AAHTRR STP TSTH.TR | ITKRSKW |
| | | | |

| | | | • | | • | | | • | | | | | | | | | | | | | | | • | | | • | |
|-------------------------|-----|--------------------|-------|-------|---------------|------|---------------|-------|------|------|--------------------|------|------|----------------------|-------------|---------|-------|-------|------|------|---------------------|-------------|-----|--------------------|-------|------|--|
| Homo_sapiens 4 | 454 | NSSNGVI | ΞE.KE | TWVE | EDELE | QVQA | A A | APDED | STTN | ITKE | KQKW | TVE | SEW | /KAG | VQK: | Y G 🗈 G | NWA | ιAIS | KNY | PFV1 | N <mark>RT</mark> A | VΜΙ | KDR | ₩RTM | KRL | GMN. | |
| Gallus_gallus 6 | 627 | NSSYGER | ER.KD | SWSD | EDELE | TDAA | ALTEI | ISSNN | STVY | GSKE | KQKW | ΤVQΙ | SEW: | I K D <mark>G</mark> | VRK. | Y G 🗈 G | RWK | ΙΤΙS | EKY | PFQI | NRTS | VQI | KDR | YRTM | KKL | GΙA. | |
| Xenopus_laevis 3 | | DRS.DIV | | | | | | | | | | | | | | | | | | | | | | | | | |
| Xenopus_tropicalis 3 | | DGS.DIV | | | | | | | | | | | | | | | | | | | | | | | | | |
| Callithrix_jacchus 4 | 411 | NSSNGVE | ΞE.KE | TWVE | EDELF | PVQA | A <i>I</i> | APDED | STTN | VTKF | KQK <mark>W</mark> | TVE | SEW | /KAG | V QK | Y G E G | NWA | AIS | KNY | PFVI | N RT A | V MI | KDR | WRTM | KRL | GMN. | |
| Oryctolagus_cuniculus 4 | 453 | NSSNGVE NSSNGVE | ΞE.KE | TWVE | EDD LF | QVQG | GΕ | .PWNR | LGAS | LILI | LQK <mark>W</mark> | TVE | SEW | /KAG | V QK | Y G E G | NWA | AIS | KNY | PFVI | N RT A | V MI | KDR | WRTM | KKL | GMN. | |
| Bos_taurus 4 | 456 | NSSNGVI | ΞΕ.KΕ | TWVE | EDELF | QVQA | A A | APDEE | SATN | TTKF | KQKW | TVE | SEW | /KA <mark>G</mark> Y | 7 QK | Y G 🗈 G | NWA | ΑIS | KNY | PFV1 | N RT A | VΜΙ | KDR | W R T M | KRL | GMN. | |
| Rattus_norvegicus 4 | 410 | NSPNGLE | EE.KE | VWSE | EDQLE | EVRA | A | .PGED | KSSN | LARF | KQKW | TIE | SEW | /KDGY | 7 QK | Y G 🖪 G | N W V | 'AIS | KSY | PFV1 | NRTA | VΜΙ | KDR | NRTM | KKL(| GLN. | |
| Mus_musculus 4 | 454 | NSPNGLE | ΞΕ.ΚΕ | VWLE | EDQLE | EVQA | A | .PGED | RSSS | LTRE | KQKW | TIE | SEW | /KD <mark>G</mark> Y | VRK. | Y G 🗈 G | NWA | ΑIS | KSY | PFV1 | N <mark>RT</mark> A | VΜΙ | KDR | ₩ <mark>RTM</mark> | KKL | GMN. | |
| | 412 | NNSNGVE | EE.KE | TWVE | EDELF | QVQA | A <i>I</i> | APDED | STTN | ITKE | K Q K 🕅 | TVE | SEW | /KAG | VQK: | Y G 🖪 G | NWA | ιAIIS | KNY | PFV | NRTA | VMI | KDR | NRTM | KRL | GMN. | |
| Monodelphis_domestica 3 | 376 | NSSNGLE | EE.KD | TWLE | EEELE | HVOV | JVPT9 | SEWST | HTNP | LTLE | KOKW | TVO | SEW: | I K A G | VKK. | YGDG | NWZ | ATS | KNF | PFVI | NRTA | VMI | KDR | NRTM | KKI (| GMN. | |
| Canis_familiaris 4 | 412 | DSSNGAE | EEKRH | ITWLE | EDELE | QVQG | GKSS <i>I</i> | APDEE | STTS | ITKE | KQKM | TVE | SEW | /KAG | VQK | Y G 🖪 G | NWA | ιAIS | KNY | PFVI | NRTA | V MI | KDR | NRTM | KKL (| GMN. | |
| Taeniopygia_guttata 3 | 363 | NSSCGTE | EE.KD | SWISD | EDELE | ANAE | EPGLE | PNS | P H | AGQΊ | V L K 🙀 | ΤΙQΙ | SEW | IKEGY | VKK. | Y G 🖪 G | KWK | SIC | LKY | PFR1 | NRTA | VMI | KDR | NRTM | KKL (| GML. | |
| Danio_rerio 4 | 494 | LDVSGI. | QD | NWSD | EDSLE | нтѕт | ΓΑΡΑ. | | K | KYTF | RKMW | SVQ | SEW | LKQ <mark>G</mark> Y | VR | YGVG | HWE | RIR | RSAF | PFA(| G <mark>RT</mark> A | VΝL | KDR | W R T M | VKL | KMV. | |
| | | | | | | | | | | | | | | | • | | | | • | | | | | | | | |
| | | | | | | | | | | | | | | | - | | | | - | | | | | | | | |