CLUSTAL 2.1 multiple sequence alignment

Homo\_sapiens ---------MPPLLAPLLCLALLPALAARGPRCSQPGETCLNGGKCEAAN 41

Pan\_troglodytes ---------MPPLLAPLLCLALLPALAARGPRCSQPGETCLNGGKCEAAN 41

Macaca\_mulatta -----------------------------GPRCSQPGETCLNGGKCEAAN 21

Mus\_musculus ---------MPRLLTPLLCLTLLPALAARGLRCSQPSGTCLNGGRCEVAN 41

Rattus\_norvegicus ---------MPRLLAPLLCLTLLPALAARGLRCSQPSGTCLNGGRCEVAN 41

Cavia\_porcellus MGRSDSLAGALSAGGAAGSAAVAFSHEGGSCLRCSQPGTCENGGRCEVLN 50

Cynops\_pyrrhogaster -----------MRIPGFAALLLTLPSLAPALRCTLQSEKCMNGGKCEALP 39

Danio\_rerio -----------MNRFLVKLTLLTAASLATVAQGQRCSEYCQNGGICEYKP 39

Oreochromis\_niloticus ----------MYRFFVKLTFLIPAIAIAQGLKCSLPTEACLNGGRCEATP 40

 \* \*\*\* \*\*

Homo\_sapiens G--TEACVCGGAFVGPRCQDPNPCLSTPCKNAGTCHVVDRRGVADYACSC 89

Pan\_troglodytes G--TEACVCGGAFVGPRCQDPNPCLSTPCKNAGTCHVVDRRGVADYACSC 89

Macaca\_mulatta G--TEACVCGGAFVGPRCQDPNPCLSTPCKNAGTCHVVDRGGMADYACSC 69

Mus\_musculus G--TEACVCSGAFVGQRCQDSNPCLSTPCKNAGTCHVVDHGGTVDYACSC 89

Rattus\_norvegicus G--TEACVCSGAFVGQRCQDPSPCLSTPCKNAGTCYVVDHGGIVDYACSC 89

Cavia\_porcellus G--TEACICSGDFVGQRCQDPNPCLSAPCKNAGTCHMVDQGGTVDYTCSC 98

Cynops\_pyrrhogaster NGTSVCTCSSSAFVGERCQYSNPCLSSPCRNSGTCQVDIRGNTVDYSCIC 89

Danio\_rerio SG-EASCRCPADFVGAQCQFPNPCNPSPCRNGGVCRPQMQGNEVGVKCDC 88

Oreochromis\_niloticus NG-NGECKCPSDYVGSRCQYPNPCSPSPCRNGGECRAVSHGNTFDFRCVC 89

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Homo\_sapiens ALGFSGPLCLTPLDNACLTNPCRNGGTCDLLT-LTEYKCRCPPGWSGKSC 138

Pan\_troglodytes PLGFSGPLCLTPLDNACLTNPCRNGGTCDLLT-LTEYKCRCPPGWSGKSC 138

Macaca\_mulatta PLGFSGPLCLTPLDNACLTNPCRNGGTCDLLT-LTEYKCRCPPGWSGKSC 118

Mus\_musculus PLGFSGPLCLTPLDNACLANPCRNGGTCDLLT-LTEYKCRCPPGWSGKSC 138

Rattus\_norvegicus PLGFSGPLCLTPLANACLANPCRNGGTCDLLT-LTEYKCRCPPGWSGKSC 138

Cavia\_porcellus SLGFSGPLCLTPLDNACLSGPCRNGGTCDLLT-LTEYKCRCPPGWSGKSC 147

Cynops\_pyrrhogaster RLGYSDKLCLTPMDNVCLNNPCRNGGTCELLSSLTQHKCRCPPGWTGETC 139

Danio\_rerio VLGFSDRLCLTPVNHACMNSPCRNGGTCSLLT-LDTFTCRCQPGWSGKTC 137

Oreochromis\_niloticus RLGFTDRLCLTPTNHACMSSPCRNGGTCHLTA-LNAYRCDCPPGWSGKTC 138

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Homo\_sapiens QQADPCASNPCANGGQCLPFEASYICHCPPSFHGPTCRQDVNECGQKPGL 188

Pan\_troglodytes QQADPCASNPCANGGQCLPFEASYICHCPPSFHGPTCRQDVNECGQKPGL 188

Macaca\_mulatta QQADPCASNPCANGGQCLPFEASYICHCPPSFHGPTCRQDVNECGQNPGL 168

Mus\_musculus QQADPCASNPCANGGQCLPFESSYICRCPPGFHGPTCRQDVNECSQNPGL 188

Rattus\_norvegicus QQADPCASNPCANGGQCLPFESSYICGCPPGFHGPTCRQDVNECSQNPGL 188

Cavia\_porcellus QQADPCASNPCANGGHCLPFESTYICGCRPGFHGSTCRQDVNECSQTPGL 197

Cynops\_pyrrhogaster QQADPCASNPCGNGGQCVPFEAQYVCKCPPAYHGPTCKLDINECTSVP-- 187

Danio\_rerio QLADPCASNPCANGGQCSAFESHYICTCPPNFHGQTCRQDVNECAVSPSP 187

Oreochromis\_niloticus QAANPCASNPCANGGLCSALESTYICKCPRAFTGQTCKQDVNECAQTPSP 188

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Homo\_sapiens CRHGGTCHNEVGSYRCVCRATHTGPNCERPYVPCSPSPCQNGGTCRPTGD 238

Pan\_troglodytes CRHGGTCHNEVGSYRCVCRATHTGPNCERPYVPCSPSPCQNGGTCRPTGD 238

Macaca\_mulatta CRHGGTCHTEVGSYRCVCRATHTGPNCERPYVPCSPSPCQNGGTCRPTGD 218

Mus\_musculus CRHGGTCHNEIGSYRCACRATHTGPHCELPYVPCSPSPCQNGGTCRPTGD 238

Rattus\_norvegicus CRHGGTCHNEIGSYRCACRATHTGPHCELPYVPCSPSPCQNGGTCRPTGD 238

Cavia\_porcellus CRNGGTCHNEVGSYRCACRPTHMGSNCELPYVPCSPSPCQNGGTCRPTGE 247

Cynops\_pyrrhogaster CKNGGTCVNEVGSYQCTCRPEYTGRNCENLYVPCYPSPCQNGGTCRQTGD 237

Danio\_rerio CRNGGTCINEVGSYLCRCPPEYTGPHCQRLYQPCLPSPCRSGGTCVQTSD 237

Oreochromis\_niloticus CLNGGVCVNEVGSYHCRCPQEYTGQHCENPYLPCSPSPCQNGGTCVQKGD 238

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Homo\_sapiens VTHECACLPGFTGQNCEENIDDCPGNNCKNGGACVDGVNTYNCRCPPEWT 288

Pan\_troglodytes VTHECACLPGFTGQNCEENIDDCPGNNCKNGGACVDGVNTYNCRCPPEWT 288

Macaca\_mulatta VTHECACLPGFTGQNCEENIDDCPGNNCKNGGACVDGVNTYNCRCPPEWT 268

Mus\_musculus TTHECACLPGFAGQNCEENVDDCPGNNCKNGGACVDGVNTYNCRCPPEWT 288

Rattus\_norvegicus TTHECACLPGFAGQNCEENVDDCPGNNCKNGGACVDGVNTYNCRCPPEWT 288

Cavia\_porcellus TTHECACLPGFTGQNCEDNVDDCPGNSCRNGGACVDGVNTYNCRCPPEWT 297

Cynops\_pyrrhogaster TTYECACLPGFDSQNCEVNIDDCPGNTCKNGGTCVDGVNTYNCQCPPEWT 287

Danio\_rerio TTHTCSCLPGFTGQTCEHNVDDCTQHACENGGPCIDGINTYNCHCDKHWT 287

Oreochromis\_niloticus TAYDCSCLPGFTGHNCEVNIDDCPGHNCQNGGVCVDGVNTYNCRCPPHYT 288

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Homo\_sapiens GQYCTEDVDECQLMPNACQNGGTCHNTHGGYNCVCVNGWTGEDCSENIDD 338

Pan\_troglodytes GQYCTEDVDECQLMPNACQNGGTCHNTHGGYNCVCVNGWTGEDCSENIDD 338

Macaca\_mulatta GQYCTEDVDECQLMPNACQNGGTCHNTHGGYNCVCVNGWTGEDCSENIDD 318

Mus\_musculus GQYCTEDVDECQLMPNACQNGGTCHNTHGGYNCVCVNGWTGEDCSENIDD 338

Rattus\_norvegicus GQYCTEDVDECQLMPNACQNAGTCHNSHGGYNCVCVNGWTGEDCSDNIDD 338

Cavia\_porcellus GQFCTEDVDECQLMPNACQNGGTCHNTQGGYNCVCVNGWTGEDCSENIDD 347

Cynops\_pyrrhogaster GQYCTEDVDECQLMPNACQNGGTCHNNHGGYNCVCVNGWTGEDCSENIDD 337

Danio\_rerio GQYCTEDVDECELSPNACQNGGTCHNTIGGFHCVCVNGWTGDDCSENIDD 337

Oreochromis\_niloticus GQYCTENVDECELMPNACQNGGTCHDTHGGYHCVCVNGWTGDDCSENIDD 338

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Homo\_sapiens CASAACFHGATCHDRVASFYCECPHGRTGLLCHLNDACISNPCNEGSNCD 388

Pan\_troglodytes CASAACFHGATCHDRVASFYCECPHGRTGLLCHLNDACISNPCNEGSNCD 388

Macaca\_mulatta CASAACFHGATCHDRVASFYCECPHGRTGLLCHLNDACISNPCNEGSNCD 368

Mus\_musculus CASAACFQGATCHDRVASFYCECPHGRTGLLCHLNDACISNPCNEGSNCD 388

Rattus\_norvegicus CASAACFQGATCHDRVASFYCECPHGRTGLLCHLNDACISNPCNEGSNCD 388

Cavia\_porcellus CASAACFNGATCHDRVASFYCECPHGRTGLLCHLNDACISNPCNEGSNCD 397

Cynops\_pyrrhogaster CANAACHSGATCHDRVASFYCECPHGRTGLLCHLNDACISSPCNEGANCD 387

Danio\_rerio CASAACSHGATCHDRVASFFCECPHGRTGLLCHLDDACISNPCQKGSNCD 387

Oreochromis\_niloticus CASAACHHGATCHDRVASFFCECPHGRTGLLCHLDDACISNPCQKGSNCD 388

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Homo\_sapiens TNPVNGKAICTCPSGYTGPACSQDVDECSLGANPCEHAGKCINTLGSFEC 438

Pan\_troglodytes TNPVNGKAICTCPSGYTGPACSQDVDECSLGANPCEHAGKCINTLGSFEC 438

Macaca\_mulatta TNPVNGKAICTCPSGYTGPACSQDVDECSLGANPCEHAGKCINTLGSFEC 418

Mus\_musculus TNPVNGKAICTCPSGYTGPACSQDVDECALGANPCEHAGKCLNTLGSFEC 438

Rattus\_norvegicus TNPVNGKAICTCPRGYTGPACSQDVDECALGANPCEHAGKCLNTLGSFEC 438

Cavia\_porcellus TNPVNGKAICTCPSGYTGPACSQDVDECALGANPCEHAGKCINTLGSFEC 447

Cynops\_pyrrhogaster TNPVNGKAICTCPSGYMGPACIQDVDECSLGANPCEHAGRCLNTLGSFQC 437

Danio\_rerio TNPVSGKAICTCPPGYTGSACNQDIDECSLGANPCEHGGRCLNTKGSFQC 437

Oreochromis\_niloticus TNPVNGKAICTCPPGYTGSACNLDIDECSLGANPCEHGGRCLNTKGSFQC 438

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Homo\_sapiens QCLQGYTGPRCEIDVNECVSNPCQNDATCLDQIGEFQCICMPGYEGVHCE 488

Pan\_troglodytes QCLQGYTGPRCEIDVNECVSNPCQNDATCLDQIGEFQCICMPGYEGVHCE 488

Macaca\_mulatta QCLQGYTGPRCEIDVNECVSNPCQNDATCLDQIGEFQCICMPGYEGVHCE 468

Mus\_musculus QCLQGYTGPRCEIDVNECISNPCQNDATCLDQIGEFQCICMPGYEGVYCE 488

Rattus\_norvegicus QCLQGYTGPRCEIDVNECISNPCQNDATCLDQIGEFQCICMPGYEGVYCE 488

Cavia\_porcellus QCLQGYSGPRCEIDVNECISNPCQNDATCLDQIGEFQCICMPGYEGLYCE 497

Cynops\_pyrrhogaster QCSPGYTGPRCEMDVNECLSNPCKNDATCLDQIGEFHCICMPGYEGVFCQ 487

Danio\_rerio KCLQGYEGPRCEMDVNECKSNPCQNDATCLDQIGGFHCICMPGYEGVFCQ 487

Oreochromis\_niloticus KCLQGYEGPRCEMDVNECMSNPCNNDATCLDQIGGFHCICMPGYEGVFCH 488

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Homo\_sapiens VNTDECASSPCLHNGRCLDKINEFQCECPTGFTGHLCQYDVDECASTPCK 538

Pan\_troglodytes VNTDECASSPCLHNGRCLDKINEFQCECPTGFTGHLCQYDVDECASTPCK 538

Macaca\_mulatta VNTDECASSPCLHNGRCLDKINEFQCECPTGFTGHLCQYDVDECASTPCK 518

Mus\_musculus INTDECASSPCLHNGHCMDKINEFQCQCPKGFNGHLCQYDVDECASTPCK 538

Rattus\_norvegicus INTDECASSPCLHNGRCVDKINEFLCQCPKGFSGHLCQYDVDECASTPCK 538

Cavia\_porcellus VNTDECASSPCLHNGRCLDRVSEFLCECPTGFSGHLCQYDVDECASTPCR 547

Cynops\_pyrrhogaster TNTDECASSPCLHNGRCIDKINEFHCECPIGFNGPLCQYDIDECASTPCK 537

Danio\_rerio INSDDCASQPCLN-GKCIDKINSFHCECPKGFSGSLCQVDVDECASTPCK 536

Oreochromis\_niloticus INTDECASQPCLNNGKCIDKINSFHCECPKGFSGSLCQVDVDECASTPCK 538

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Homo\_sapiens NGAKCLDGPNTYTCVCTEGYTGTHCEVDIDECDPDPCHYGSCKDGVATFT 588

Pan\_troglodytes NGAKCLDGHNTYTCVCTEGYTGTHCEVDIDECDPDPCHYGSCKDGVATFT 588

Macaca\_mulatta NGAKCLDGPNTYTCVCTEGYTGMHCEVDIDECDPDPCHYGSCKDGVATFT 568

Mus\_musculus NGAKCLDGPNTYTCVCTEGYTGTHCEVDIDECDPDPCHYGSCKDGVATFT 588

Rattus\_norvegicus NGAKCLDGPNTYTCVCTEGYTGTHCEVDIDECDPDPCHIGLCKDGVATFT 588

Cavia\_porcellus NGAKCLDGPNTYSCVCTEGYTGIHCEVDINECDPDPCHYGSCKDGVAAFT 597

Cynops\_pyrrhogaster NGAKCLDGANSYTCDCAEGYSGFHCETDIDECDPDPCHYGTCSDGIAGFT 587

Danio\_rerio NGAKCTDGPNKYTCECTPGFSGIHCELDINECASSPCHYGVCRDGVASFT 586

Oreochromis\_niloticus NGAKCTDGPNKYTCECAEGYTGQHCEIDINECYSNPCHYGTCRDGLASFT 588

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Homo\_sapiens CLCRPGYTGHHCETNINECSSQPCRHGGTCQDRDNAYLCFCLKGTTGPNC 638

Pan\_troglodytes CLCRPGYTGHHCETNINECSSQPCRHGGTCQDRDNAYLCFCLKGTTGPNC 638

Macaca\_mulatta CLCRPGYTGHHCETNINECSSQPCRHGGTCQDRDNAYLCFCLKGTTGPNC 618

Mus\_musculus CLCQPGYTGHHCETNINECHSQPCRHGGTCQDRDNSYLCLCLKGTTGPNC 638

Rattus\_norvegicus CLCQPGYTGHHCETNINECHSQPCRHGGTCQDRDNYYLCLCLKGTTGPNC 638

Cavia\_porcellus CLCQPGYTGHHCETNINECASQPCRHGGTCQDRDNAYLCLCLKGTTGPNC 647

Cynops\_pyrrhogaster CHCEPGYTGHRCEIDVNECQSMPCQNGGECQDRKNSYSCRCPKGTTGVNC 637

Danio\_rerio CDCRPGYTGRLCETNINECLSQPCRNGGTCQDRENAYICTCPKGTTGVNC 636

Oreochromis\_niloticus CQCRPGYTGRLCETNINECLSQPCKNGGICQDKENAYICSCPQGTAGFNC 638

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Homo\_sapiens EINLDDCASSPCDSGTCLDKIDGYECACEPGYTGSMCNINIDECAGNPCH 688

Pan\_troglodytes EINLDDCASSPCDSGTCLDKIDGYECACEPGYTGSMCNINIDECVGNPCH 688

Macaca\_mulatta EINLDDCASSPCDSGTCLDKIDGYECACEPGYTGSMCNINIDECAGNPCH 668

Mus\_musculus EINLDDCASNPCDSGTCLDKIDGYECACEPGYTGSMCNVNIDECAGSPCH 688

Rattus\_norvegicus EINLDDCASNPCDSGTCLDKIDGYECACEPGYTGSMCNVNIDECAGSPCH 688

Cavia\_porcellus EINLDDCASSPCDAGTCLDKIDGYECACEPGYTGSMCNINIDECAGSPCH 697

Cynops\_pyrrhogaster EINMDDCASSPCDYGKCIDRINGYECACEPGYTGIMCNINIDECDSNPCH 687

Danio\_rerio EINIDDCKRKPCDYGKCIDKINGYECVCEPGYSGSMCNINIDDCALNPCH 686

Oreochromis\_niloticus EVNLDDCKSKPCDYGKCIDKINGYECACEPGYTGAMCNINIDDCAINPCH 688

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Homo\_sapiens NGGTCEDGINGFTCRCPEGYHDPTCLSEVNECNSNPCVHGACRDSLNGYK 738

Pan\_troglodytes NGGTCEDGINGFTCRCPEGYHDPTCLSEVNECNSNPCVHGACRDSLNGYK 738

Macaca\_mulatta NGGTCQDGINGFTCRCPEGYHDPTCLSEVNECNSNPCVHGACRDSLNGYK 718

Mus\_musculus NGGTCEDGIAGFTCRCPEGYHDPTCLSEVNECNSNPCIHGACRDGLNGYK 738

Rattus\_norvegicus NGGTCEDGIAGFTCRCPEGYHDPTCLSEVNECNSNPCIHGACRDGLNGYK 738

Cavia\_porcellus NGGTCEDGINSFTCRCPEGYHDPTCLSEVNECSSNPCIHGSCQDSLNGYW 747

Cynops\_pyrrhogaster NGGTCKDGINGFTCVCPQGYQDPTCLSEVNECNSNPCIHGRCHDGINGYR 737

Danio\_rerio NGGTCIDGVNSFTCLCPDGFRDATCLSQHNECSSNPCIHGSCLDQINSYR 736

Oreochromis\_niloticus NGGTCVDGINSFTCLCPEGYNDATCLSEVDECSSNPCIHGRCQDLLNGYK 738

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Homo\_sapiens CDCDPGWSGTNCDINNNECESNPCVNGGTCKDMTSGYVCTCREGFSGPNC 788

Pan\_troglodytes CDCDPGWSGTNCDINNNECESNPCVNGGTCKDMTSGYVCTCREGFSGPNC 788

Macaca\_mulatta CDCDPGWSGTNCDINNNECESNPCVNGGTCKDMTSGYVCTCREGFSGPNC 768

Mus\_musculus CDCAPGWSGTNCDINNNECESNPCVNGGTCKDMTSGYVCTCREGFSGPNC 788

Rattus\_norvegicus CDCAPGWSGTNCDINNNECESNPCVNGGTCKDMTSGYVCTCREGFSGPNC 788

Cavia\_porcellus CDCDSGWSGTNCDINNNECESNPCVNGGTCRDMTSGYVCTCREGFSGPNC 797

Cynops\_pyrrhogaster CDCDPGWSGTNCDINNNECDSNPCMNGGTCKDMTSGYLCACRDGFSGPNC 787

Danio\_rerio CVCEAGWMGRNCDININECLSNPCVNGGTCKDMTSGYLCTCRAGFSGPNC 786

Oreochromis\_niloticus CTCDSGWSGQNCDINNNECESNPCMNGGTCKDMTSGYHCTCRVGFTGPNC 788

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Homo\_sapiens QTNINECASNPCLNQGTCIDDVAGYKCNCLLPYTGATCEVVLAPCAPSPC 838

Pan\_troglodytes QTNINECASNPCLNQGTCIDDVAGYKCNCLLPYTGDTCEVVLAPCAPSPC 838

Macaca\_mulatta QTNINECASNPCLNQGTCIDDVAGYKCNCLLPYTGATCEVVLAPCAPSPC 818

Mus\_musculus QTNINECASNPCLNQGTCIDDVAGYKCNCPLPYTGATCEVVLAPCATSPC 838

Rattus\_norvegicus QTNINECASNPCLNQGTCIDDVAGYKCNCPLPYTGATCEVVLAPCATSPC 838

Cavia\_porcellus QTNINECASNPCLNQGTCIDDVAGYKCNCLLPYTGTTCEVVLAPCAPSPC 847

Cynops\_pyrrhogaster QTNINECASNPCLNQGTCIDDVAGYNCNCLLPYTGPTCGEVLAPCSDNPC 837

Danio\_rerio QMNINECASNPCLNQGSCIDDVAGFKCNCMLPYTGEVCENVLAPCSPRPC 836

Oreochromis\_niloticus QTNINECASNPCLNQGTCIDDVAGYKCNCLLPYTGENCETLLAPCSPRPC 838

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Homo\_sapiens RNGGECRQSEDYESFSCVCPTGWQGQTCEVDINECVLSPCRHGASCQNTH 888

Pan\_troglodytes RNGGECRQSEDYESFSCVCPTGWQGQTCEVDINECVLSPCRHGASCQNTH 888

Macaca\_mulatta RNGGECRESEDYESFSCVCPTGWQGQTCEVDINECVVSPCRHGASCQNTH 868

Mus\_musculus KNSGVCKESEDYESFSCVCPTGWQGQTCEVDINECVKSPCRHGASCQNTN 888

Rattus\_norvegicus KNSGVCKESEDYESFSCVCPTGWQGQTCEIDINECVKSPCRHGASCQNTN 888

Cavia\_porcellus KNSGVCRESEDYESFSCICPSGWQGQTCEVDINECVKSPCRHGASCQNTN 897

Cynops\_pyrrhogaster KNGGECGESEDYESFSCSCPAGWQGQTCEIDINECVKSPCRNGAVCQNTD 887

Danio\_rerio KNGGVCRESEDFQSFSCNCPAGWQGQTCEVDINECVRNPCTNGGVCENLR 886

Oreochromis\_niloticus KNGGICKESEDYQSFSCICPEGWQGQTCEIDINECVKSPCRNGALCLNTM 888

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Homo\_sapiens GGYRCHCQAGYSGRNCETDIDDCRPNPCHNGGSCTDGINTAFCDCLPGFR 938

Pan\_troglodytes GGYRCHCQAGYSGRNCETDIDDCRPNPCHNGGSCTDGINTAFCECLPGFR 938

Macaca\_mulatta GGYRCHCQAGYSGRNCETDIDDCRPNPCHNGGSCTDGINTAFCDCLPGFQ 918

Mus\_musculus GSYRCLCQAGYTGRNCESDIDDCRPNPCHNGGSCTDGINTAFCDCLPGFQ 938

Rattus\_norvegicus GSYRCLCQAGYTGRNCESDIDDCRPNPCHNGGSCTDGVNAAFCDCLPGFQ 938

Cavia\_porcellus GDYRCHCQAGYTGRDCETDVDDCRPNPCHNGGSCTDGVNTAFCDCLPGFQ 947

Cynops\_pyrrhogaster GSYRCNCKAGYSGRHCETDIDDCLPNPCHSGGSCSDGINAFFCNCLAGFR 937

Danio\_rerio GGFQCRCNPGFTGALCENDIDDCEPNPCSNGGVCQDRVNGFVCVCLAGFR 936

Oreochromis\_niloticus GGYQCKCQPGYSGQKCETDIDDCKPNPCSNGGLCRDGINSFTCTCPPGFR 938

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Homo\_sapiens GTFCEEDINECASDPCRNGANCTDCVDSYTCTCPAGFSGIHCENNTPDCT 988

Pan\_troglodytes GTFCEEDINECASDPCRNGANCTDCVDSYTCTCPAGFSGIHCENNTPDCT 988

Macaca\_mulatta GTFCEEDINECASDPCRNGANCTDCVDSYTCTCPAGFSGIHCENNTPDCT 968

Mus\_musculus GAFCEEDINECASNPCQNGANCTDCVDSYTCTCPVGFNGIHCENNTPDCT 988

Rattus\_norvegicus GAFCEEDINECATNPCQNGANCTDCVDSYTCTCPTGFNGIHCENNTPDCT 988

Cavia\_porcellus GAFCEEDINECASSPCRNGANCTDCVDSYTCTCPAGFNGIHCENNTPDCT 997

Cynops\_pyrrhogaster GPKCEEDINECASNPCKNGANCTDCVNSYTCTCPSGFSGIHCENNTPDCT 987

Danio\_rerio GERCAEDIDECVSAPCRNGGNCTDCVNSYTCSCPAGFSGINCEINTPDCT 986

Oreochromis\_niloticus GGRCEQDINECESNPCRNGANCTDCVNSYTCTCPPGFSGINCEINTNDCT 988

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Homo\_sapiens ESSCFNGGTCVDGINSFTCLCPPGFTGSYCQHDVNECDSQPCLHGGTCQD 1038

Pan\_troglodytes ESSCFNGGTCVDGINSFTCLCPPGFTGSYCQHDVNECDSQPCLHGGTCQD 1038

Macaca\_mulatta ESSCFNGGTCVDGINSFTCLCPPGFTGSYCQHDVNECDSQPCLHGGTCQD 1018

Mus\_musculus ESSCFNGGTCVDGINSFTCLCPPGFTGSYCQYDVNECDSRPCLHGGTCQD 1038

Rattus\_norvegicus ESSCFNGGTCVDGINSFTCLCPPGFTGSYCQYDVNECDSRPCLHGGTCQD 1038

Cavia\_porcellus ESSCFNGGTCVDGINSFTCLCPPGFTGSYCQHDINECDSRPCLNGGTCQD 1047

Cynops\_pyrrhogaster ESSCFNGGTCIDGINTFTCRCPAGFIGSYCEHDVNECDSKPCLNGGTCQD 1037

Danio\_rerio ESSCFNGGTCVDGISSFSCVCLPGFTGNYCQHDVNECDSRPCQNGGSCQD 1036

Oreochromis\_niloticus DSSCFNGGTCVDGINTFTCLCLPGFTGSYCQYDINECDSKPCLNGGTCLD 1038

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Homo\_sapiens GCGSYRCTCPQGYTGPNCQNLVHWCDSSPCKNGGKCWQTHTQYRCECPSG 1088

Pan\_troglodytes GCGSYRCTCPQGYTGPNCQNLVHWCDSSPCKNGGKCWQTHTQYRCECPSG 1088

Macaca\_mulatta GCGSYRCTCPQGYTGPNCQNLVHWCDSSPCKNGGKCWQTHTQYRCECPSG 1068

Mus\_musculus SYGTYKCTCPQGYTGLNCQNLVRWCDSAPCKNGGRCWQTNTQYHCECRSG 1088

Rattus\_norvegicus SYGTYKCTCPQGYTGLNCQNLVRWCDSAPCKNGGKCWQTNTQYHCECRSG 1088

Cavia\_porcellus SYGTYKCTCPQGYTGLNCQNLVRWCDSSPCKNGGQCWQTSTLYRCECHSG 1097

Cynops\_pyrrhogaster SYGTYKCTCPQGFTGMNCQNLVRWCESSPCKHGGKCWQTNNLYRCECNSG 1087

Danio\_rerio GYGTYKCTCPHGYTGLNCQSLVRWCDSSPCKNGGSCWQQGASFTCQCASG 1086

Oreochromis\_niloticus SYGTYKCTCPHGYTGINCQNLVRWCDSAPCKNGGLCWQQGASYTCQCQTG 1088

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Homo\_sapiens WTGLYCDVPSVSCEVAAQRQGVDVARLCQHGGLCVDAGNTHHCRCQAGYT 1138

Pan\_troglodytes WTGLYCDVPSVSCEVAAQRQGVDVARLCQHGGLCVDAGNTHHCRCQAGYT 1138

Macaca\_mulatta WTGLYCDVPSVSCEVAAQRQGVDVAQLCQHGGLCVDAGNTHHCRCQAGYT 1118

Mus\_musculus WTGVNCDVLSVSCEVAAQKRGIDVTLLCQHGGLCVDEGDKHYCHCQAGYT 1138

Rattus\_norvegicus WTGFNCDVLSVSCEVAAQKRGIDVTLLCQHGGLCVDEEDKHYCHCQAGYT 1138

Cavia\_porcellus WTGLYCDVPSVSCKVAAQQRDIDVAYLCQHGGLCVDAGNTHHCRCQAGYT 1147

Cynops\_pyrrhogaster WTGLYCDVPSVSCEVAAKQQGVDVANLCRNSGLCEDTGNTHHCRCQAGYT 1137

Danio\_rerio WTGIYCDVPSVSCEVAARQQGVSVAVLCRHAGQCVDAGNTHLCRCQAGYT 1136

Oreochromis\_niloticus WTGLYCDIPSVSCEVAAKQQGVDVAHLCRNSGQCLDAGNTHYCRCQAGYT 1138

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Homo\_sapiens GSYCEDLVDECSPSPCQNGATCTDYLGGYSCKCVAGYHGVNCSEEIDECL 1188

Pan\_troglodytes GSYCEDLVDECSPSPCQNGATCTDYLGGYSCKCVAGYHGVNCSEEIDECL 1188

Macaca\_mulatta GSYCEDLVDECSPSPCQNGATCTDYLGGYSCKCVAGYHGVNCSEEIDECL 1168

Mus\_musculus GSYCEDEVDECSPNPCQNGATCTDYLGGFSCKCVAGYHGSNCSEEINECL 1188

Rattus\_norvegicus GSYCEDEVDECSPNPCQNGATCTDYLGGFSCKCVAGYHGSNCSEEINECL 1188

Cavia\_porcellus GSYCEEEVDECSPSPCQNGATCTDYLGGYSCKCVAGYHGTNCSEETNECL 1197

Cynops\_pyrrhogaster GSYCEEQVDECSPNPCQNGATCTDYLGGYSCECVAGYHGINCSQEINECQ 1187

Danio\_rerio GSYCQEQVDECQPNPCQNGATCTDYLGGYSCECVPGYHGMNCSKEINECL 1186

Oreochromis\_niloticus GSYCQEQVDECSPNPCQNGATCTDYLGGYSCECVPGYHGVNCSKEINECQ 1188

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Homo\_sapiens SHPCQNGGTCLDLPNTYKCSCPRGTQGVHCEINVDDCNPPVDPVSRSPKC 1238

Pan\_troglodytes SHPCQNGGTCLDLPNTYKCSCPRGTQGVHCEINVDDCNPPVDPVSRSPKC 1238

Macaca\_mulatta SHPCQNGGTCLDLPNTYKCSCPRGTQGVHCEINVDDCNPPVDPVSRSPKC 1218

Mus\_musculus SQPCQNGGTCIDLTNSYKCSCPRGTQGVHCEINVDDCHPPLDPASRSPKC 1238

Rattus\_norvegicus SQPCQNGGTCIDLTNTYKCSCPRGTQGVHCEINVDDCHPPLDPASRSPKC 1238

Cavia\_porcellus SQPCQNGGTCIDLTNTYKCSCPRGTQGVHCEINVDDCSPLHDLASRSPKC 1247

Cynops\_pyrrhogaster SHPCQNGGTCIDLVNTYKCSCPRGTQGVHCEINVDDCNPFFDPVTHEPKC 1237

Danio\_rerio SQPCQNGGTCIDLVNTYKCSCPRGTQGVHCEIDIDDCSPSVDPLTGEPRC 1236

Oreochromis\_niloticus SQPCQNGGTCIDLINTYKCSCPRGTQGVHCEINLDDCNPSRDPLTNEPKC 1238

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Homo\_sapiens FNNGTCVDQVGGYSCTCPPGFVGERCEGDVNECLSNPCDARGTQNCVQRV 1288

Pan\_troglodytes FNNGTCVDQVGGYSCTCPPGFVGERCEGDVNECLSNPCDARGTQNCVQRV 1288

Macaca\_mulatta FNNGTCVDQVGGYSCTCPPGFVGERCEGDVNECLSNPCDARGTQNCVQRV 1268

Mus\_musculus FNNGTCVDQVGGYTCTCPPGFVGERCEGDVNECLSNPCDPRGTQNCVQRV 1288

Rattus\_norvegicus FNNGTCVDQVGGYTCTCPPGFVGERCEGDVNECLSNPCDPRGTQNCVQRV 1288

Cavia\_porcellus FNNGTCVDQVGGYTCTCPPGFVGERCEGDVNECLSNPCDARGTQNCVQRV 1297

Cynops\_pyrrhogaster FNNGKCVDRVGGYNCNCLPGFVGERCEGDVNECLSNPCDPRGTQNCIQLV 1287

Danio\_rerio FNGGRCVDRVGGYGCVCPAGFVGERCEGDVNECLSDPCDPSGSYNCVQLI 1286

Oreochromis\_niloticus FNNGKCVDRIGGYQCVCPPGYVGERCEGDVNECLSDPCDPRGSYNCIQLT 1288

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Homo\_sapiens NDFHCECRAGHTGRRCESVINGCKGKPCKNGGTCAVASNTARGFICKCPA 1338

Pan\_troglodytes NDFHCECRAGHTGRRCESVINGCKGKPCKNGGTCAVASNTARGFICKCPA 1338

Macaca\_mulatta NDFHCECRAGHTGRRCESVINGCKGKPCKNGGTCAVASNTARGFICKCPA 1318

Mus\_musculus NDFHCECRAGHTGRRCESVINGCRGKPCKNGGVCAVASNTARGFICRCPA 1338

Rattus\_norvegicus NDFHCECRAGHTGRRCESVINGCRGKPCRNGGVCAVASNTARGFICRCPA 1338

Cavia\_porcellus NDFHCECRAGHTGRRCESVIDGCKGKPCRNGGVCAVATNTARGFICRCPA 1347

Cynops\_pyrrhogaster NDYRCECRQGYSGRRCNTVVDGCKGKPCRNGGTCSVASNTDRGFICKCPS 1337

Danio\_rerio NDFRCECRTGYTGKRCETVFNGCKDTPCKNGGTCAVASNTKHGYICKCQP 1336

Oreochromis\_niloticus NSYRCECRTGYTGQRCDKVFDGCKGRPCRNGGTCAVASNTPHGFVCKCPP 1338

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Homo\_sapiens GFEGATCENDARTCGSLRCLNGGTCISGPRSPTCLCLGPFTGPECQFPAS 1388

Pan\_troglodytes GFEGATCENDARTCGSLRCLNGGTCISGPRSPTCLCLGPFTGPECQFPAS 1388

Macaca\_mulatta GFEGATCENDARTCGSLRCLNGGTCISGPRSPTCLCLGPFTGPECQFPAS 1368

Mus\_musculus GFEGATCENDARTCGSLRCLNGGTCISGPRSPTCLCLGSFTGPECQFPAS 1388

Rattus\_norvegicus RFEGATCENDARTCGSLRCLNGGTCISGPRSPTCLCLGSFTGPECQFPAS 1388

Cavia\_porcellus GFEGATCENDARTCGSLRCLNGGTCISGPRSPTCLCLGAFTGPECQFPAS 1397

Cynops\_pyrrhogaster GFDGAICQYDSRSCGNLPCLHGGSCVSILKTSQCMCTAAYTGPQCQYPVS 1387

Danio\_rerio GYSGSSCEYDSQSCGSLRCRNGATCVSGHLSPRCLCAPGFSGHECQTRMD 1386

Oreochromis\_niloticus GFTGSTCEYDSRACGSLNCRNGGTCVSGHLGPRCLCPSTFTGPECQTPTD 1388

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Homo\_sapiens SPCLGGNPCYNQGTCEPTSESPFYRCLCPAKFNGLLCHILDYSFGGGAGR 1438

Pan\_troglodytes SPCLGGNPCYNQGTCEPTSESPFYRCLCPAKFNGLLCHILDYSFGGGAGR 1438

Macaca\_mulatta SPCLGGNPCYNQGTCEPTSESPFYRCLCPAKFNGLLCHILDYSFGGGAGR 1418

Mus\_musculus SPCVGSNPCYNQGTCEPTSENPFYRCLCPAKFNGLLCHILDYSFTGGAGR 1438

Rattus\_norvegicus SPCVGSNPCYNQGTCEPTSESPFYRCLCPAKFNGLLCHILDYSFTGAAGR 1438

Cavia\_porcellus SPCMGDNPCYNQGTCEPTAESPFYRCLCPAKFNGLQCHILDYSFVGGAGR 1447

Cynops\_pyrrhogaster SPCN-SSPCYNGGTCKFVPEAPFYQCMCPGKFNGLYCHILDYEFNGGVGQ 1436

Danio\_rerio SPCL-VNPCYNGGTCQPISDAPFYRCSCPANFNGLLCHILDYSFSGGQGR 1435

Oreochromis\_niloticus SLCI-SNPCYNGGTCQITPDPPFFQCSCPSNFNGLLCHILDYSFVGGFGR 1437

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Homo\_sapiens DIPPP-LIEEACELPECQEDAGNKVCSLQCNNHACGWDGGDCSLNFNDPW 1487

Pan\_troglodytes DIPPP-LIEEACELPECQEDAGNKVCSLQCNNHACGWDGGDCSLNFNDPW 1487

Macaca\_mulatta DIPPP-QIEEACELPECQEDAGNKVCSLQCNNHACGWDGGDCSLNFNDPW 1467

Mus\_musculus DIPPP-QIEEACELPECQVDAGNKVCNLQCNNHACGWDGGDCSLNFNDPW 1487

Rattus\_norvegicus DIPPP-QIEEACELPECQEDAGNKVCNLQCNNHACGWDGGDCSLNFNDPW 1487

Cavia\_porcellus DIPPP-EVEEACELPECQEDAGNKVCSLQCNNHACGWDGGDCSLNFNDPW 1496

Cynops\_pyrrhogaster DIIPP-EIEEQCEIPVCASSSGNKICNTQCNNHACGWDGGDCSLNFNDPW 1485

Danio\_rerio DIAPPVEVEIRCEIAQCEGRGGNAICDTQCNNHACGWDGGDCSLNFDDPW 1485

Oreochromis\_niloticus DITPPPEVEMSCEIPQCDEFAGNHICNSVCNNHACGWDGGDCSLNFDDPW 1487

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Homo\_sapiens KNCTQSLQCWKYFSDGHCDSQCNSAGCLFDGFDCQRAEGQCNPLYDQYCK 1537

Pan\_troglodytes KNCTQSLQCWKYFSDGHCDSQCNSAGCLFDGFDCQRAEGQCNPLYDQYCK 1537

Macaca\_mulatta KNCTQSLQCWKYFSDGHCDSQCNSAGCLFDGFDCQRAEGQCNPLYDQYCK 1517

Mus\_musculus KNCTQSLQCWKYFSDGHCDSQCNSAGCLFDGFDCQLTEGQCNPLYDQYCK 1537

Rattus\_norvegicus KNCTQSLQCWKYFSDGHCDSQCNSAGCLFDGFDCQLTEGQCNPLYDQYCK 1537

Cavia\_porcellus KNCSQSLQCWKYFSDGRCDSQCNSAGCLFDGFDCQHAEGQCNPLYDQYCK 1546

Cynops\_pyrrhogaster KNCTQSLQCWKYFNDGKCDSQCNNAGCLYDGFDCQKVEVQCNPLYDQYCR 1535

Danio\_rerio QNCSAALQCWRYFNDGKCDEQCATAGCLYDGFDCQRLEGQCNPLYDQYCR 1535

Oreochromis\_niloticus QNCSSALQCWRYFNDGKCDGQCNSPGCLYDGFDCQGQEGQCNPLYDQYCK 1537

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Homo\_sapiens DHFSDGHCDQGCNSAECEWDGLDCAEHVPERLAAGTLVVVVLMPPEQLRN 1587

Pan\_troglodytes DHFSDGHCDQGCNSAECEWDGLDCAEHVPERLAAGTLVVVVLMPPEQLRN 1587

Macaca\_mulatta DHFSDGHCDQGCNSAECEWDGLDCAEHVPERLAAGTLVVVVLMPPEQLRN 1567

Mus\_musculus DHFSDGHCDQGCNSAECEWDGLDCAEHVPERLAAGTLVLVVLLPPDQLRN 1587

Rattus\_norvegicus DHFSDGHCDQGCNSAECEWDGLDCAEHVPERLAAGTLVLVVLLPPDQLRN 1587

Cavia\_porcellus DHFSDGHCDQGCNSAECEWDGLDCAEHVPERLAAGTLVVVVLLPPEQLRN 1596

Cynops\_pyrrhogaster DHFQDGHCDQGCNNAECEWDGLDCSNNMPEKLADGTLVIVVLTPPELLKN 1585

Danio\_rerio DHYADGHCDQGCNNAECEWDGLDCADDVPQKLAVGSLVLVVHIPPDELRN 1585

Oreochromis\_niloticus DHYADGHCDQGCNNAECEWDGLDCANNMPEKLADGHLVLVVHIPPDELKN 1587

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Homo\_sapiens SSFHFLRELSRVLHTNVVFKRDAHGQQMIFPYYGREEELRKHPIKRAAEG 1637

Pan\_troglodytes SSFHFLRELSRVLHTNVVFKRDAHGQQMIFPYYGREEELRKHPIKRAAEG 1637

Macaca\_mulatta SSFHFLRELSRVLHTNVVFKRDAHGQQMIFPYYGREEELRKHPIKRAAEG 1617

Mus\_musculus NSFHFLRELSHVLHTNVVFKRDAQGQQMIFPYYGHEEELRKHPIKRSTVG 1637

Rattus\_norvegicus NSFHFLRDVSHVLHTNVVFKRDAQGQQMIFPYYGREEELRKHPIKRSAVG 1637

Cavia\_porcellus NSFHFLRELSRVLHTNVVFKRDAQGQQMIFPYYGREEELRKHPIKRSAPG 1646

Cynops\_pyrrhogaster NSFNFLRELSRVLHTNVVFKKDSKGEYMIIPYYGSDEELTKHHIKRSTET 1635

Danio\_rerio RSSSFLRELSSLLHTNVVFRRDANGEALIFPYYGSEHELSKHKRSD---- 1631

Oreochromis\_niloticus RSSAFLRELSSVLHTNVVFRRDAKGEPMIFPYYGNEQDLVKHNVLKRSAD 1637

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Homo\_sapiens ---WAAPDALLGQVKASLLPGGSEGGRRRRELDPMDVRGSIVYLEIDNRQ 1684

Pan\_troglodytes ---WAAPDALLGQVKASLLPGGSEGGRRRRELDPMDVRGSIVYLEIDNRQ 1684

Macaca\_mulatta ---WAAPEALLGQVKASLLPGGGGGGRRRRELDPMDVRGSIVYLEIDNRQ 1664

Mus\_musculus ---WATS---------SLLPGTS-GGRQRRELDPMDIRGSIVYLEIDNRQ 1674

Rattus\_norvegicus ---WATT---------SLLPGTN-GGRQRRELDPMDIHGSIVYLEIDNRQ 1674

Cavia\_porcellus ---WATPGSLLGQAAASLLTSEG-PGRQRRELDPMDIRGSIVYLEIDNRQ 1692

Cynops\_pyrrhogaster ---WSDVSTNVFNKVKMSLYTSS-NGRQRRELDQNEIKGSIVYLEIDNRQ 1681

Danio\_rerio -----WTDPGQLMQRARRSLTSFLKPRTRRELDHMEVKGSIVYLEIDNRQ 1676

Oreochromis\_niloticus GWPDWASMPASVLDQVKDGVSSIVSSRKRRELDPLQIKGSVVYLEIDNRQ 1687

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Homo\_sapiens CVQASSQCFQSATDVAAFLGALASLGSLNIPYKIEAVQSETVEPPPPAQL 1734

Pan\_troglodytes CVQASSQCFQSATDVAAFLGALASLGSLNIPYKIEAVQSETVEPPPPAQL 1734

Macaca\_mulatta CVQASSQCFQSATDVAAFLGALASLGSLNIPYKIEAVQSESVEPPPPAQL 1714

Mus\_musculus CVQSSSQCFQSATDVAAFLGALASLGSLNIPYKIEAVKSEPVEPPLPSQL 1724

Rattus\_norvegicus CVQSSSQCFQSATDVAAFLGALASLGSLNIPYKIEAVKSETVEPPLPSQL 1724

Cavia\_porcellus CVQLSSQCFQSATDVAAFLGALASLGSLNIPYKIEAVQSETVEPPPPSQL 1742

Cynops\_pyrrhogaster CFQSSLQCFQSATDVAAFLGALASHGNLNIPYKIEAVKSETGEPSKGPPL 1731

Danio\_rerio CFQQSDECFQSATDVAAFLGALASSGNLNVPYIIEAVTSEGG-PPKTGEM 1725

Oreochromis\_niloticus CYQQSTECFQSATDVAAFLGALATSGNLNVP-YIEAVTSVRP-TPSGSEL 1735

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Homo\_sapiens HFMYVAAAAFVLLFFVGCGVLLSRKRRRQHGQLWFPEGFKVSEASKKKRR 1784

Pan\_troglodytes HFMYVAAAAFVLLFFVGCGVLLSRKRRRQHGQLWFPEGFKVSEASKKKRR 1784

Macaca\_mulatta HFMYVAAAAFVLLFFVGCGVLLSRKRRRQHGQLWFPEGFKVSEASKKKRR 1764

Mus\_musculus HLMYVAAAAFVLLFFVGCGVLLSRKRRRQHGQLWFPEGFKVSEASKKKRR 1774

Rattus\_norvegicus HLMYVAAAAFVLLFFVGCGVLLSRKRRRQHGQLWFPEGFKVSEASKKKRR 1774

Cavia\_porcellus HLMYLIGAAFVLLFFVGCGVLLSRKRRRQHGQLWFPEGFKVSEASKKKRR 1792

Cynops\_pyrrhogaster YLMYVLVVALVVLAFIGVGVLVSRKRHREHGQLWFPEGFKVTETNKSKRR 1781

Danio\_rerio YPMFLVLLALAVLALAAVGVVVSRKRKREHGQLWFPEGFKVNEP-KKKRR 1774

Oreochromis\_niloticus YPMYIVFLGLAALGFICLGVLVSRKRRREHGQLWFPEGFKASEPSKKKRS 1785

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Homo\_sapiens EPLGEDSVGLKPLKNASDGALMDDNQNEWGDE-DLETKKFRFEEPVVLPD 1833

Pan\_troglodytes EPLGEDSVGLKPLKNASDGALMDDNQNEWGDE-DLETKKFRFEEPVVLPD 1833

Macaca\_mulatta EPLGEDSVGLKPLKNASDGALMDDNQNEWGDE-DLETKKFRFEEPVVLPD 1813

Mus\_musculus EPLGEDSVGLKPLKNASDGALMDDNQNEWGDE-DLETKKFRFEEPVVLPD 1823

Rattus\_norvegicus EPLGEDSVGLKPLKNASDGALMDDNQNEWGDE-DLETKKFRFEEPVVLPD 1823

Cavia\_porcellus EPLGEDSVGLKPLKNVSDGALMDDNQNEWGDE-DLEAKKFRFEEPVVLPD 1841

Cynops\_pyrrhogaster PPLGEDSVGLKPLKNSTD--LMDDNQTEWGDEETLDSKRFRFEQEAMLPD 1829

Danio\_rerio EPVGEDSVGLKPLKNSDSSLMDEQLSEWAEDDT-NKRFRFEGQS---ILE 1820

Oreochromis\_niloticus EPLGEDSVGLKPMKHSDMNLMDDNQNEWEDEDPECKRFRFEEQA---MLD 1832

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Homo\_sapiens LDDQTDHRQWTQQHLDAADLRMSAMAPTPPQGEVDADCMDVNVRGPDGFT 1883

Pan\_troglodytes LDDQTDHRQWTQQHLDAADLRMSAMAPTPPQGEVDADCMDVNVRGPDGFT 1883

Macaca\_mulatta LDDQTDHRQWTQQHLDAADLRMSAMAPTPPQGEVDADCMDVNVRGPDGFT 1863

Mus\_musculus LSDQTDHRQWTQQHLDAADLRMSAMAPTPPQGEVDADCMDVNVRGPDGFT 1873

Rattus\_norvegicus LDDQTDHRQWTQQHLDAADLRVSAMAPTPPQGEVDADCMDVNVRGPDGFT 1873

Cavia\_porcellus LDDQTDHRQWTQQHLDAADLRVSAMAPTPPQGEVDADCMDVNVRGPDGFT 1891

Cynops\_pyrrhogaster MNDQTDRRQWTQQHLDAADLRISSMAPTPPQGEIDPDCLDVNVRGPDGFT 1879

Danio\_rerio MSGQLDHRQWTQQHLDAADLRLNSMAPTPPQGQIENDCMDVNVRGPDGFT 1870

Oreochromis\_niloticus LGDHTDHRKWTQQHLDAADLRIESIAPTPPQGDIENGCMDVNVRGPDGFT 1882

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Homo\_sapiens PLMIASCSGGGLETGNSEEEEDAPA-VISDFIYQGASLHNQTDRTGETAL 1932

Pan\_troglodytes PLMIASCSGGGLETGNSEEEEDAPA-VISDFIYQGASLHNQTDRTGETAL 1932

Macaca\_mulatta PLMIASCSGGGLETGNSEEEEDAPA-VISDFIYQGASLHNQTDRTGETAL 1912

Mus\_musculus PLMIASCSGGGLETGNSEEEEDAPA-VISDFIYQGASLHNQTDRTGETAL 1922

Rattus\_norvegicus PLMIASCSGGGLETGNSEEEEDAPA-VISDFIYQGASLHNQTDRTGETAL 1922

Cavia\_porcellus PLMIASCSGGGLETGNSEEEEDAPA-VISDFIYQGASLHNQTDRTGETAL 1940

Cynops\_pyrrhogaster PLMIASCSGGGLETGNSEEEEDASANVISDFLYQGANLHNQTDRTGETAL 1929

Danio\_rerio PLMIASCSGGGLENENGEAEEDPSADVITDFIYHGANLHNQTDRTGETAL 1920

Oreochromis\_niloticus PLMIASCSGGGLENGNSEEEEDPSAEIISDFIYQGANLHNQTDRTGETAL 1932

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Homo\_sapiens HLAARYSRSDAAKRLLEASADANIQDNMGRTPLHAAVSADAQGVFQILIR 1982

Pan\_troglodytes HLAARYSRSDAAKRLLEASADANIQDNMGRTPLHAAVSADAQGVFQILIR 1982

Macaca\_mulatta HLAARYSRSDAAKRLLEASADANIQDNMGRTPLHAAVSADAQGVFQILIR 1962

Mus\_musculus HLAARYSRSDAAKRLLEASADANIQDNMGRTPLHAAVSADAQGVFQILLR 1972

Rattus\_norvegicus HLAARYSRSDAAKRLLEASADANIQDNMGRTPLHAAVSADAQGVFQILLR 1972

Cavia\_porcellus HLAARYSRSDAAKRLLEASADANIQDNMGRTPLHAAVSADAQGVFQILIR 1990

Cynops\_pyrrhogaster HLAARYARSDAAKRLLEASANANVQDNMGRTPLHAAVAADAQGVFQILIR 1979

Danio\_rerio HLAARYARSDAAKRLLESCADANVQDNMGRTPLHAAVAADAQGVFQILIR 1970

Oreochromis\_niloticus HLAARYARSDAAKRLLESSADANVQDNMGRTPLHAAVAADAQGVFQILIR 1982

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Homo\_sapiens NRATDLDARMHDGTTPLILAARLAVEGMLEDLINSHADVNAVDDLGKSAL 2032

Pan\_troglodytes NRATDLDARMHDGTTPLILAARLAVEGMLEDLINSHADVNAVDDLGKSAL 2032

Macaca\_mulatta NRATDLDARMHDGTTPLILAARLAVEGMLEDLINSHADVNAVDDLGKSAL 2012

Mus\_musculus NRATDLDARMHDGTTPLILAARLAVEGMLEDLINSHADVNAVDDLGKSAL 2022

Rattus\_norvegicus NRATDLDARMHDGTTPLILAARLAVEGMLEDLINSHADVNAVDDLGKSAL 2022

Cavia\_porcellus NRATDLDARMHDGTTPLILAARLAVEGMLEDLINSHADVNAVDDLGKSAL 2040

Cynops\_pyrrhogaster NRATELDARMHDGTTPLILAARLAVEGMVEELINCHADVNAVDDLGKSAL 2029

Danio\_rerio NRATDLDARMHDGTTPLILATRLAVEGMVEELINCHADPNAVDDSGKSAL 2020

Oreochromis\_niloticus NRATDLDARMHDGTTPLILAARLAVEGMVEELINCHADANATDESGKSAL 2032

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Homo\_sapiens HWAAAVNNVDAAVVLLKNGANKDMQNNREETPLFLAAREGSYETAKVLLD 2082

Pan\_troglodytes HWAAAVNNVDAAVVLLKNGANKDMQNNREETPLFLAAREGSYETAKVLLD 2082

Macaca\_mulatta HWAAAVNNVDAAVVLLKNGANKDMQNNKEETPLFLAAREGSYETAKVLLD 2062

Mus\_musculus HWAAAVNNVDAAVVLLKNGANKDMQNNKEETPLFLAAREGSYETAKVLLD 2072

Rattus\_norvegicus HWAAAVNNVDAAVVLLKNGANKDMQNNKEETPLFLAAREGSYETAKVLLD 2072

Cavia\_porcellus HWAAAVNNVDAALVLLKNGANKDMQNNKEETPLFLAAREGSYETAKVLLD 2090

Cynops\_pyrrhogaster HWAAAVNNVDAAIVLLKNGANKDMQDNKEETPLFLAAREGSYETGKVLLD 2079

Danio\_rerio HWAAAVNNVDAAVVLLKNGANKDLQNNKEETPLFLAAREGSYETAKVLLD 2070

Oreochromis\_niloticus HWAAAVNNVEAAVVLLKNGANKDMQDNKEETPLFLAAREGSYETAKVLLE 2082

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Homo\_sapiens HFANRDITDHMDRLPRDIAQERMHHDIVRLLDEYNLVRSPQLHGAPLGGT 2132

Pan\_troglodytes HFANRDITDHMDRLPRDIAQERMHHDIVRLLDEYNLVRSPQLHGAPLGGT 2132

Macaca\_mulatta HFANRDITDHMDRLPRDIAQERMHHDIVRLLDEYNLVRSPQLHGAPLGGT 2112

Mus\_musculus HFANRDITDHMDRLPRDIAQERMHHDIVRLLDEYNLVRSPQLHGTALGGT 2122

Rattus\_norvegicus HFANRDITDHMDRLPRDIAQERMHHDIVRLLDEYNLVRSPQLHGTALGGT 2122

Cavia\_porcellus HFANRDITDHMDRLPRDIAQERMHHDIVRLLDEYNLVRSPQLHNAALGST 2140

Cynops\_pyrrhogaster HFANRDITDHMDRLPRDIAQERMHHDIVRLLDEYNLVRSPQMHNSLG--A 2127

Danio\_rerio HLANRDIADHLDQLPRDIAHERMHHDIVRLLEEYNLVRSPPLP------- 2113

Oreochromis\_niloticus HFANREITDHLDQLPRDIAQERMHHDIVRLLDEYNVVRSPGLHSAPL-ST 2131

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Homo\_sapiens PTLSPPLCSPNGYLGSLKPGVQGKKVRKPSSKGLA---CGSKEAKDLKAR 2179

Pan\_troglodytes PTLSPPLCSPNGYLGSLKPGVQGKKVRKPSSKGLA---CGSKEAKDLKAR 2179

Macaca\_mulatta PTLSPPLCSPNGYLGSLKPGVQGKKVRKPSSKGLA---CGSKEAKDLKAR 2159

Mus\_musculus PTLSPTLCSPNGYLGNLKSATQGKKARKPSTKGLA---CGSKEAKDLKAR 2169

Rattus\_norvegicus PTLSPTLCSPNGYLGNLKSATQGKKARKPSTKGLA---CSSKEAKDLKAR 2169

Cavia\_porcellus PTLSPTLCSPNGYLGNLKPAMQGKKARKPSTKGLA---CGSKEAKDLKAR 2187

Cynops\_pyrrhogaster PTLSPQICSPSSYLSNMKPAAQGKKARKQSIKSNG---CNGKESKDVKAR 2174

Danio\_rerio --LSPPLCCPNTYLGIKPSPGNNNNTAKKTRKPGGKGVGGKDSGKDIRTK 2161

Oreochromis\_niloticus STLSPPLCSPNDYLSN----LKPNISGKKIRKPSSGGKGGKDSGKDNRLK 2177

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Homo\_sapiens RKKSQDGKGCLLDSSGMLSPVDSLESPHGYLSDVASPPLLPSPFQQSPSV 2229

Pan\_troglodytes RKKSQDGKGCLLDSSGMLSPVDSLESPHGYLSDVASPPLLPSPFQQSPSV 2229

Macaca\_mulatta RKKSQDGKGCLLDSSGMLSPVDSLESPHGYLSDVASPPLLPSPFQQSPSV 2209

Mus\_musculus RKKSQDGKGCLLDSSSMLSPVDSLESPHGYLSDVASPPLLPSPFQQSPSM 2219

Rattus\_norvegicus RKKSQDGKGCLLDSSSMLSPVDSLESPHGYLSDVASPPLLPSPFQQSPSM 2219

Cavia\_porcellus RKKSQDGKGCLLDSSSMLSPVDSLESPHGYLSDVASPPLLPSPFQPSPSL 2237

Cynops\_pyrrhogaster RKKSQDGK-NLLDSSGGLSPVDSLESPHGYISDVASPPLMTSPFQQSPSM 2223

Danio\_rerio KKKSGDGKNGGIMEVGVLSPVDSLESPHGYLSDVSSPPMMTSPFQQSPPI 2211

Oreochromis\_niloticus KKKSVDGKSNLLDTSAVLSPVDSLESPHGYLSDVASPPMAS-PFQQSPPM 2226

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Homo\_sapiens PLNHLPGMPDTHLGIGHLNVAAKPEMAALGGGGRLAFETGPPRLSHLPVA 2279

Pan\_troglodytes PLNHLPGMPDTHLGIGHLNVVAKPEMAALGGGGRLAFETGPPRLSHLPVA 2279

Macaca\_mulatta PLNHLPGMPDTHLGIGHLNVAAKPEMAALGGGSRLAFEAGPPRLSHLPVA 2259

Mus\_musculus PLSHLPGMPDTHLGISHLNVAAKPEMAALAGGSRLAFEPPPPRLSHLPVA 2269

Rattus\_norvegicus PLSHLPGMPDTHLGISHLNVAAKPEMAALAGGSRLAFEPPPPRLSHLPVA 2269

Cavia\_porcellus PLSHLPGMPDAHLGINHLNVTAKPEMAALGGGSRLAFEPGPPRLSHLPVA 2287

Cynops\_pyrrhogaster ALNLLPGMTDGHMTLNHHNLAGKQDMTMAGS-NRMTFEPVPPRLSHLSVS 2272

Danio\_rerio SLNQLQGLADSHMGGALQG--------------LGKPFDSAPRLSHLPVA 2247

Oreochromis\_niloticus SLNHLQGNGDSHPGQMNMGKDL----------SCMAFDPNPPRLSHLPVS 2266

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Homo\_sapiens SGTSTVLGSSSGGALNFTVGGSTSLNGQCEWLSRLQSGMVPNQYNPLRGS 2329

Pan\_troglodytes SGTSTVLGSNSGGALNFTVGGSTSLNGQCEWLSRLQSGMVPNQYNPLRGS 2329

Macaca\_mulatta SGTSTVLGCSSGGAMNFTVGGSTSLNGQCEWLSRLQSGMVPNQYNPLRGS 2309

Mus\_musculus SSASTVLSTNGTGAMNFTVGAPASLNGQCEWLPRLQNGMVPSQYNPLRPG 2319

Rattus\_norvegicus SSASTVLSTNGTGAMNFTVGAPASLNGQCEWLPRLQNGMVPSQYNPLRPG 2319

Cavia\_porcellus SSTSTVLGASSSGAVNFTVGTAAGLNGQCDWLSRLQNGMVSGQYNPLRGA 2337

Cynops\_pyrrhogaster SPSTVMS----SGSLNFTVGGAPTMNGQCDWLSRLQNGMVSNQYSALR-- 2316

Danio\_rerio N------------------NVGGAQAGACDWLQRVQQQQQQ--------- 2270

Oreochromis\_niloticus SP-----------NSQGATSIGGSRGGQCDWVSRMHSSIGQ--------- 2296

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Homo\_sapiens VAPGPLSTQAPSLQHGMVGPLHSSLAASALSQMMSYQGLPSTRLATQPHL 2379

Pan\_troglodytes VAPGPLSTQAPSLQHGMVGPLHSSLAASALSQMMSYQGLPSTRLATQPHL 2379

Macaca\_mulatta VAPGPLSTQAPSLQHGMVGPLHSSLAASALSQMMSYQGLPSTRLATQPHL 2359

Mus\_musculus VTPGTLSTQAAGLQHSMMGPLHSSLSTNTLSPIIYQG-LPNTRLATQPHL 2368

Rattus\_norvegicus VTPGTLSTQAAGLQHGMMGPIHSSLSTNTLSPIIYQG-LPNTRLATQPHL 2368

Cavia\_porcellus VAPGTLSTQAPTLQHGMMGPLQSGLSTNTLSQMMNYQGLPSTRLATQPHL 2387

Cynops\_pyrrhogaster ---NNAQSSAHQQAHSMMTSLQNGLPTTTLSQLMSYQAMPNTRIGSQPHL 2363

Danio\_rerio ----QQQQQQAGMLMPTMLSATN------MPQVMGYPTMQSSHLGAPSHM 2310

Oreochromis\_niloticus ----QGSFAQPPQITHNMMGPLHGVSTATLSQIMGYQNLQTSHLGSSAHM 2342

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Homo\_sapiens VQTQQVQPQ---NLQMQQQNLQPA-NIQQQQSLQPPPPPPQPHLGVSSAA 2425

Pan\_troglodytes VQTQQVQPQ---NLQMQQQNLQPA-NIQQQQSLQPPPPPPQPHLGVSSAA 2425

Macaca\_mulatta VQTQQVQPQ---NLQMQQQNLQPP-NIQQQPNLQPPPPPPQPHLGVSSAA 2405

Mus\_musculus VQTQQVQPQ---NLQLQPQNLQPP---------------SQPHLSVSSAA 2400

Rattus\_norvegicus VQTQQVQPQ---NLQIQPQNLQPP---------------SQPHLSVSSAA 2400

Cavia\_porcellus VQAQQVPQVQQQNLQVQPPNLQPPPNIQQPQSLQPQLPPSQPHLGVGSVA 2437

Cynops\_pyrrhogaster MQAQQLQQIQQQNLQQQIQQQQQT---------------MQQHHNSSSSA 2398

Danio\_rerio IAHQNMAPMQHQNISHHFLGDLSG-------------------------- 2334

Oreochromis\_niloticus MQQAHSRQLQHQNSNNTTAAQSLS-------------------------- 2366

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Homo\_sapiens SGHLGRSFLSGEPSQADVQPLGPSSLAVHTILPQESPALPTSLPSSLVPP 2475

Pan\_troglodytes SGHLGRSFLSGEPSQADVQPLGPSSLAVHTILPQESPALPTSLPSSLVPP 2475

Macaca\_mulatta SGHLGRSFLGGEPSQADVQPLGPSSLAVHTILPQESPALPTSLPSSLVPP 2455

Mus\_musculus NGHLGRSFLSGEPSQADVQPLGPSSLPVHTILPQESQALPTSLPSSMVPP 2450

Rattus\_norvegicus NGHLGRSFLSGEPSQADVQPLGPSSLPVHTILPQESQALPTSLPSSMVPP 2450

Cavia\_porcellus NGHLGRSFMGGEPSQADVQPLGPNSLTVHTILPQEGQNLPTSMPSSLVPP 2487

Cynops\_pyrrhogaster NNHIGQVFLSNDLTQADLQQMTSNSMAVHTILPQDTQLLTSSLPSSLTQS 2448

Danio\_rerio ----------------LDLQSSSG--------HAPIQTILPQDSQRMAPP 2360

Oreochromis\_niloticus ----------------QSFPTVELNGSDMQQNNCSGRTMPIHTVMPQETQ 2400

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Homo\_sapiens VTAAQFLTPPSQHSYSS-PVDNTPSHQLQVPEHPFLTPSPESPDQWSSSS 2524

Pan\_troglodytes VTAAQFLTPPSQHSYSS-PVDNTPSHQLQVPEHPFLTPSPESPDQWSSSS 2524

Macaca\_mulatta VTAAQFLTPPSQHSYSSSPVDNTPSHQLQVPEHPFLTPSPESPDQWSSSS 2505

Mus\_musculus MTTTQFLTPPSQHSYSSSPVDNTPSHQLQVPEHPFLTPSPESPDQWSSSS 2500

Rattus\_norvegicus MTTTQFLTPPSQHSYSSSPVDNTPSHQLQVPEHPFLTPSPESPDQWSSSS 2500

Cavia\_porcellus MTTAQFLTPPSQHSYSSSPVDNTPSHQLQVPEHPFLTPSPESPDQWSSSS 2537

Cynops\_pyrrhogaster IATTQFLTPPSQHSYSS-PMDNTPSHQLQVSDHPFLTPSPESPDQWSSSS 2497

Danio\_rerio ISSTQFLTPPSQHSYSN-PMDNTP-NHQQVPDHPFLTPSAGSPDQWSSSS 2408

Oreochromis\_niloticus ILGTQFLTPPSQHSYSG-PIDNTPSHQLQVPDHPFLTPSPGSPDQWSSSS 2449

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Homo\_sapiens PHSNVSDWSEGVSSPPTSMQSQIARIPEAFK 2555

Pan\_troglodytes PHSNVSDWSEGVSSPPTSMQSQIARIPEAFK 2555

Macaca\_mulatta PHSNVSDWSEGVSSPPTSMQSQIARIPEAFK 2536

Mus\_musculus PHSNISDWSEGISSPPTTMPSQITHIPEAFK 2531

Rattus\_norvegicus RHSNISDWSEGISSPPTSMPSQITHIPEAFK 2531

Cavia\_porcellus PHSNISDWSEGISSPPTSMQSQITHIPEAFK 2568

Cynops\_pyrrhogaster PHSNISDWSEGISSPPTSMQVQIAHIPEAFK 2528

Danio\_rerio PHSNLSDWSEGISSPPTSMQMNHIPEAFK-- 2437

Oreochromis\_niloticus PHSNMSDWSEGISSPPTSIHSQMNLIPDQFK 2480

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