

>Hs_Pou3f1

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-----WAGGPHL-----EHGKAGGG-GTGRADDGGGGGGF---HAR-----  
-----LV-----HQGAA-----HAGAA-WA-----  
QGSTAHHLGPAMSPS-----PGASGGHQPOPLGLYAQAAYPGGGGGGLAGMLAAGG-----GGA--  
GPGLHHAL-HEDGHEAQLSEPSPPPHLGAHGHAHGHAHAGGLHAAAHLHPGAGGGG---SSV---  
GEHSDDEDAPSSDDLEQFAKQFKQRRIKLGFQTQADVGLALGTL----  
YGNVFSQTTICRFEALQLSFKNMCKLKPLLNKWLEETDSSSGSPTNLDKIAAQGRKRKKRTSIEVGVKGALESHFLKCPK  
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>Gg_Pou3f1

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-----GGGGAHLPPA-----AEHGKGGP---GGPREELPPA-AAF--HPR-----  
-----PHLV-----RTGR--WA-----QGGAAPHL-PPMSPP-----  
SG-----QPLLYGQPY-----GGLNGML-----GPP--GPALHHGHGLRDPLGA-----  
EEAAGHELAASPPPLGP-----  
PEPSDEDAPSSDDLEQFAKQFKQRRIKLGFQTQADVGLALGTL----  
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>Mm_Pou3f1

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-----LV-----HQGAA-----HAGAA-WA-----QGGTAHHLGPAMSPS-----  
PGAGGGHQPOPLGLYAQAAYPGGGGGGLAGMLAAGG-----GGA--GPGLHHAL-  
HEDGHEAQLSEPSPPPHLGAHGHAHGHAHAGGLHAAAHLHPGAGGGG---SSV---  
GEHSDDEDAPSSDDLEQFAKQFKQRRIKLGFQTQADVGLALGTL----  
YGNVFSQTTICRFEALQLSFKNMCKLKPLLNKWLEETDSSSGSPTNLDKIAAQGRKRKKRTSIEVGVKGALESHFLKCPK  
PSAHEITGLADSLQLEKEVVRVWFCNRRQKEKRMTPA-----AGA--GHPPMDDVYAPGE-----  
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>Xl_Pou3f1

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-----WGSGLHLGAQ-----AEHGKSGV---QSSREDLSSS---F--HHH-----  
-----RSHLV-----HQQTPSS---HA---WA-----QSGG-HHL-PSMSPG-----  
SNSH-----QPLIYSQSSY-----TNLNGML-----GPQ--ASSLHHSM--RDPLHD-----  
DPGVHDTHVESPPQHL-----GHH---  
QDHSDEDAPSSDDLEQFAKQFKQRRIKLGFQTQADVGLALGTL----  
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>Lo_Pou3f1

-----MATTAQY---IPRNNSL---PSNPLMHPD-----
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-----WTSATHIGQ-----PDHSKTSV---QASREDLGNG---F--HHR-----
-----SHLV-----HQQTQNS---HHGS--WA-----PTTT-HHL-SPLSPA-----
SNGH-----QSLVYSQSGY-----TNLNAML-----SPQ--PSSLHHSM--RDPLHE----
DAGSHDNQMESPOQPF-----SHH---
QDHSDEDAPSSDDLEQFAKQFKQRRIKLGFTQADVGLALGTL----
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>O1_Pou3f1

-----GAMATTAQY---IPRNNSL---PSNPLMHPD-----
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-----WSSGTHIGQ-----QEHA-SV---QASREDLSSG---F--HHR-----
-----SHLV-----HQQTQSA---HHGS--WA-----PSTT-HHL-SPLSPA-----
SNGH-----QSLVYSQPGY-----TNLNAML-----SPQ--PGALHHGM--RDPLHD----
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>Dr_Pou3f1

-----MATTAQY---IPRNNSL---PSNPLMHPD-----
SDRMHQG-----TTYREVQ---KMMHHEYLQGL--ATNTG--HPMSLTHHQWLP---TSNTD-----
-----WTSATHIGQ-----AEHNK-AS---VQSREDLGNG---YHR-----
-----SHLV-----HQPTQNS---HHGS--WA-----PTTT-HHL-SPLSPA-----
SNGH-----QSLVYSQTYG-----TML-----SP---QPSLHHGL--RDPLHD----
DAGSHDNQMESPOQPF-----SHH---
QDHSDEDAPSSDDLEQFAKQFKQRRIKLGFTQADVGLALGTL----
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>Tr_Pou3f1

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SDRMHQG-----TTYREVQ---KMMHHEYLQGL-AATNTG--HPMSLTHHQWLP---TSNTD-----
-----WSSGTHIGQ-----QDHKA-SV---QATREDLSSG---F--HHR-----
-----SHLV-----HQQTQGG---HHGS--WA-----PATT-HHL-SPLSPA-----
SNSH-----QSLVYSQPGY-----TNLNAML-----SPQ--PGTLHHGM--RDPLHD----
DSGSHDHQMESPOQAF-----SHH---
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>Hs_Pou3f2

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PGGMQOGA-----GGYREAQ---SLVQGDYG---ALQSNG--HPLSHAH-QWIT---

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-QQQHQQQQQQQQQQQQQQQQQQQQ-QQQRPPHLV-----HHAANH-----HPGPGAWR-----
SAAAAAHLPPSMGAS-----NG-----GLLYSQPS-----FTVNGMLGAG-----GQP--
AGLHHHGL--RDAHDEPHHADHHPHSHPHQPPPPPPPPQPPGHPG-----AHH---
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>Gg_Pou3f2

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--QHP-----PPGRAPHV-----HHGGGGGG--HHAA--WR-----
AGGA-AHLPPGMAAA-----NGAA-----QAGLLYPQPPG-----FTVNGML-----GAAQ-
PALHHHGL--RDAHDEAPGPPAPPHGA-EHPHGHPPAGGGGGGGGAAAAGG-----PHH---
EAHSEDETPTSDDLEQFAKQFKQRRIKLGFTQADVGLALGTL-----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLKNWLEEADSSSGSPTSIDKIAAQGRKRKKRTSIEVSVKGALESHFLKCPK
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>Mm_Pou3f2

-----MATAASNHY-----SLLT--SSASIVHAEP-----
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PDIKPSVVVQQGGRGDELHGPALQQQHQQQQQQQQQQQQQQQQQQQQ-QQQRPPHLV-----
HHAANH-----HPGPGAWR-----SAAAAAHLPPSMGAS-----NG-----GLLYSQPS-----
FTVNGMLGAG-----GQP--AGLHHHGL--RDAHDEPHHADHHPHSHPHQPPPPPPPPQPPGHPG-----
-----AHH---DPHSEDETPTSDDLEQFAKQFKQRRIKLGFTQADVGLALGTL-----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLKNWLEEADSSSGSPTSIDKIAAQGRKRKKRTSIEVSVKGALESHFLKCPK
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>X1_Pou3f2

-----MATTASNHY-----NLLG--SGSSIVHAD-----
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-----APWATS-PLGQ-----QDIKP-TV---QSSRDELHVS-GTL--QHQ-----
-----SRAPHLV-----HPAHGN---HHGPGAWR-----STGS-THL-SSMASS-----
NG-----QGLLYSQPS-----FTVNGMINP-----GSG--QGIHHHGL--RDSHDD-----
HHGDHGHQVVSQAQQQHSQLQ-----GGH---
QDSEDETPTSDDLEQFAKQFKQRRIKLGFTQADVGLALGTL-----
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>Lo_Pou3f2

-----MATTASNHY-----NILT--SSSSIVHSE-----
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-----PRPPLV-----HQ-PHGN---HHDARAWR-----TTTA-AHI-PSMASS-----

NG-----QSLIYSQPG-----FSVNGMIP-----GSS--QGMHHHNL--RDSHED-----
HHSPHLSHDHGHQQPPQHQQH-----QSH---
HDHSDDEDTPPTSDDLEQFAKQFKQRRRIKLGFTQADVGLALGTL-----
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PSAPEITSLADSLQLEKEVVRVWFCNRRQKEKRMTTP-----GG--ALPGPEDVYG-----
-----DTP-----PHHGVQTPVQ*-----
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>O1_Pou3f2

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-----SRPPLV-----HQ-THGN---HHDGRAWR-----TTTA-AHI-PSMATT-----
NG-----QSLIYSQPG-----FNVNGLIP-----GSG--QGMHHHNL--RDSHEE-----
HHSPHLSEHGHPPSQHQQHQP-----QSH---
HDHSDDEDTPPTSDDLEQFAKQFKQRRRIKLGFTQADVGLALGTL-----
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-----DTP-----PHHGVQTPVQ-----
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>Dr_Pou3f2a

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-----SPWPAS-PLGE-----QDIKP-----VEELQHS-----PRQ-----
-----AHLV-----PQSQ---HHETAARW-----ATTT-AHM-PSMSTS-----
NG-----QSLIYSQPGY-----GEMHH-----EE-----
HHSPHLSEHGHPQ-----
SLHSDDEDTPPTSDDLEQFAKQFKQRRRIKLGFTQADVGLALGTL-----
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-----DAS-----PHHGAQTPVP*-----
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>Dr_Pou3f2b

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-----GPWSSS-PLGE-----QDIKP-AV---QSPRDEMHSN-SNL--QH-----
-----SRPPLV-----HQ-THGN---HHDRAWR-----TTTA-AHI-PSMATS-----
NG-----QSLIYSQPS-----FSVNGMIP-----GSG--QGIHHHSM--RDAHED-----
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HDHSDDEDTPPTSDDLEQFAKQFKQRRRIKLGFTQADVGLALGTL-----
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-----DTP-----PHHGVQTPVQ-----
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>Tr_Pou3f2b

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HDHSDDEDTPPTSDDLEQFAKQFKQRRRIKLGFTQADVGLALGTL-----

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>Tr_Pou3f2a

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HQHGGHHDQSDDEDTPTSDELEQFAKQFKQRRIKLGFTQADVGLALGTL----
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>Hs_Pou3f3

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-GAGRDDLHAG-TAL--HHR-----GPPHLGPP-----PPPPHQG-----
HPGG--WGAAAAAAAAAAAAAAAAA-AHL-PSMAGG-----QOPP-----PQSLLYSQPGG-----
FTVNGMLSAPPGPGGGGGGGAG-GGA--QSLVHPGLVRGDTPELA---
EHHHHHHHHHAHPHPHPHHAQGPPhHGGGGGGGAGPGL---NSH---
DPHSDDEDTPTSDDLEQFAKQFKQRRIKLGFTQADVGLALGTL----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLNKWLEEADSSTGSPTSIDKIAAQGRKRKKRTSIEVSVKGALESHFLKCPK
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-----TVSADTPP-----PHHGLQTSVQ-----
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>Gg_Pou3f3

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AAL--HHR-----PPhLG-----PPHQG---HPAA--WG-----
---AAAAAHL-PAMAGG-----QQQQ-----QSLLYSQPGG-----FTVNGMLS PA-----GGG--
QSLVHPGLVRGGETAELG--EHPGHHHHHHHPHPGHAPHHGAV-----NSH---
EAHSDDEDTPTSDDLEQFAKQFKQRRIKLGFTQADVGLALGTL----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLNKWLEEADSSTGSPTSIDKIAAQGRKRKKRTSIEVSVKGALESHFLKCPK
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>Mm_Pou3f3

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TAL--HHR-----GPPHLGPP-----PPPPHQG---HPGG--
WGAAAAAAAAAAAAAAAAA-AHL-PSMAGG-----QOPP-----PQSLLYSQPGG-----FTVNGMLSAPPGPGGGGGGGAG-
GGA--QSLVHPGLVRGDTPELA---EHHHHHHHHHAHPHPHPHHAQGPPhHGGGGGAGPGL-----NSH---
DPHSDDEDTPTSDDLEQFAKQFKQRRIKLGFTQADVGLALGTL----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLNKWLEEADSSTGSPTSIDKIAAQGRKRKKRTSIEVSVKGALESHFLKCPK

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>X1_Pou3f3

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AAL--HHR-----PPhLA-----PHQG-----HPGG--WG-----
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DPHSDEDTPTSDDLEQFAKQFKQRRIKLGFTQADVGLALGTL----
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>Lo_Pou3f3

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TTL--HHR-----PPhLG-----PHQS-----HPGA--WG-----
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DPHSDEDTPTSDDLEQFAKQFKQRRIKLGFTQADVGLALGTL----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLKNWLEEDSSTGSPTSIDKIAAQGRKRKKRTSIEVSVKGALESHFLKCPK
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>O1_Pou3f3a

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SLPHAAAAAAAAAAAAEAG-----SPWPPS-PQ-----P-----QELKR-----NNGRDELHAG-
SAL--HHR-----PAHVG-----PHQA-----HPGS--WG-----
---GSSA-AHI--SLGEG-----QQ-----QSLIYSQPGG-----FTVNGML-----
GAHTGQSLMHSGLVRGESPEL---DHSNHHHHHHHHNHHTHHHQHGG-----VGH---
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>O1_Pou3f3b

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SLPHAAAAAAAAAAVAAAEAG-----SPWSTS-PVGMTGSPQQ-----QDVKN-----PARDDLHTG-
TAL--HHR-----PPhLA-----PHHT-----HAGT--WG-----
---STTA-AHI-NSISGG-----QQQQ-----QSLIYSQPGG-----FTVNGMLS-----PGG--
QTLVHPGLVRGDTPDL---EHGSHHHHHHHQHPhHQQHHGGV-----NSH---
DPHSDDDTPTSDDLEQFAKQFKQRRIKLGFTQADVGLALGTL----
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NGHFLVDYLDKA-----SEASDQRVTTTS-----SFHQVILAH-----

>Dr_Pou3f3a

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SLPHAAAAAAAAAAAAAAEAG-----SPWSSS-PVGMAGSPQQ-----QDVKS-----SSNREDLHSG-
TAL--HHR-----PSHLG-----AHQS----HQSA--WG-----
---GTTA-SHI-STITGG-----QQQS-----QSLIYSQPGG-----FTVNGML-----NPP--
GSLVHPGLMRGESPEM----DHHHHHHHHQOQHPHHHHHHQHAGV-----NSH---
DSHSEDETPTSDDLEQFAKQFKQRRIKLGFTQADVGLALGTL----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLNKWLEEADSTTGSPIDSIDKIAAQGRKRKRTSIEVSVKGALESHFLKCPK
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>Dr_Pou3f3b

-----MATAASNPY---LASSSIL---SSGSIVHSDS-----
GGGMQQGSAAVTSVSGGYRGDPTV-KMVQSDFMQGAMAASNGG--HMLSHAH-QWVT---
SLPHAAAAAAAAAAVAAAEAG-----SPWSSS-PVGMTGSPQQ-----QDVKN-----NSGRDDLHSG-
TAL--HHR-----APHLG-----PHQT----HAGA--WG-----
---STTA-AHI-PSLTGS-----QOQQ-----QSLIYSQPGG-----FTVNGML-----
SPPGSQSLVHPGLVRGDTPEL----DHSSHHHHHHQHQQHQQAHHGTV-----NSH---
DPHSEDETPTSDDLEHFAKQFKQRRIKLGFTQADVGLALGTL----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLNKWLEEADSSTTGSPIDSIDKIAAQGRKRKRTSIEVSVKGALESHFLKCPK
PSAQEITSLADNLQLEKEVVRVWFCNRRQKEKRMTPP-----GV---PQTPEDVYSQVG-----
NGHFLVDYLDKASLTGPSEPGDQRVTTTS-----SFHQVILAH-----

>Tr_Pou3f3a

-----MATAASNPY---LPSNSIL---SSGSIVHSDSA-----
GGGMQPG-----SA-----AMVQSDFMQGAMAASNGG--HMLSHAH-QWVT---
SLPHAAAAAAAAAAVAAAEAG-----SPWSSS-PVGMTGSPQQ-----QDVKN-----SARDDLHTG-
TAL--HHR-----PPHIT-----AHQS----HAAA--WG-----
---STTA-AHI-NSISGG-----QOQQ-----QSLLYSQPGG-----FTVNGMLS-----PGS--
QSLVHPSLVRGGTDPDL----DHGSHHHHHQHQQHPPHQQHHGGV-----ASH---
DPHSDDDTPTSDDLEQFAKQFKQRRIKLGFTQADVGLALGTL----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLNKWLEEADSSTTGSPIDSIDKIAAQGRKRKRTSIEVSVKGALESHFLKCPK
PSAQEISSLADNLQLEKEVVRVWFCNRRQKEKRMTPP-----GV---AQTPEDVYSQTA-----
-----PLHGLQKNVQ-----
--

>Tr_Pou3f3b

-----MATAASNPY---LPSNSIL---SSGSIVHSDSA-----
GGGMQPGSAAVTSVSGGYRGDPSV-KMVQSDFMQGAMAASNGG--HMLSHAH-QWVT---
SLPHAAAAAAAAAAVAAAEAG-----SPWSSS-PVGMTGSPQQ-----QDVKN-----SARDDLHTG-
TAL--HHR-----PPHIT-----AHQS----HAAA--WG-----
---STTA-AHI-NSISGG-----QOQQ-----QSLLYSQPGG-----FTVNGML-----SPGS-
QSLVHPSLVRGGTDPDL----DHGSHHHHHQHQQHPPHQQHHGGV-----ASH---
DPHSDDDTPTSDDLEQFAKQFKQRRIKLGFTQADVGLALGTL----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLNKWLEEADSSTTGSPIDSIDKIAAQGRKRKRTSIEVSVKGALESHFLKCPK
PSAQEISSLADNLQLEKEVVRVWFCNRRQKEKRMTPP-----GV---AQTPEDVYSQVG-----
NGHFLVDYLDKASDVGDRVTTTG-----SFHQVILAH-----
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>Hs_Pou3f4

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-----MATAASNPY-----SIL---SSTSLVHAD-----
SAGMQQG-----SPFRNPQ---KLLQSDYLQG---VPSNG--HPLGH---HWVT---SLSDG-----
-----GPWSSTLATSPLDQ-----QDVKP-----GREDLQLG-AII--HHR-----
-----SPHVA-----HHSPTN---HPNA--WG-----ASP-APN-PSITSS-----
GQ-----PLNVYSQPG-----FTVSGMLEHGGLTPPPA-----AAS--AQSLHPVL--REPP-----
DHGELGSHHC-----
QDHSDEETPTSDELEQFAKQFKQRRIKLGFTQADVGLALGTL----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLNKWLEEADSSTGSPTSIDKIAAQGRKRKRTSIEVSVKGVLETHFLKCPK
PAAQEISSLADSLQLEKEVVRVWFCNRRQKEKRMTTP-----GD---QQPHEVYSHTV-----
-----KTDT-----SCHDL-----
--
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>Gg_Pou3f4

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-----MATAASNPY-----GLL---GSGSLAHAD-----
GAGMQQG-----SPFRNPQ---KLLQSEYLQG---VPGNG--HPLGH---HWVT---SLSDA-----
-----APWPSALAGGPLEQ-----PDVKP-----GREDLQLG-ALL--HHR-----
-----SPHVS-----HHSPTN---HPGA--WG-----ASP-AHG-GSLGPA-----
-GQP-----PPLGVYPQAG-----FAVGGVLEHGGLTPPPAAAAQQPPP--PQGLHPG-----
EHGELGGHHC-----
QDHSDEETPTSDELEQFAKQFKQRRIKLGFTQADVGLALGTL----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLNKWLEEADSSTGSPTSIDKIAAQGRKRKRTSIEVSVKGVLETHFLKCPK
PAAQEISSLADSLQLEKEVVRVWFCNRRQKEKRMTTP-----GE---QQQHEVYAHGV-----
-----KTDS-----ACHDL-----
--
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>Mm_Pou3f4

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-----MATAASNPY-----SIL---SSSLVHAD-----
SAGMQQG-----SPFRNPQ---KLLQSDYLQG---VPSNG--HPLGH---HWVT---SLSDG-----
-----GPWSSTLATSPLDQ-----QDVKP-----GREDLQLG-AII--HHR-----
-----SPHVA-----HHSPTN---HPNA--WG-----ASP-PA-PSITSS-----
SSGQ-----PLNVYSQPG-----FTVSGMLEHGGLTPPPA-----AAS--TQSLHPVL--REPP-----
DHGELGSHHC-----
QDHSDEETPTSDELEQFAKQFKQRRIKLGFTQADVGLALGTL----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLNKWLEEADSSTGSPTSIDKIAAQGRKRKRTSIEVSVKGVLETHFLKCPK
PAAQEISSLADSLQLEKEVVRVWFCNRRQKEKRMTTP-----GD---QQPHEVYSHTV-----
-----KTDA-----SCHDL-----
--
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>Xl_Pou3f4

```
-----MATAASNPY-----SIL---SSSLVHAD-----
SAVMQQG-----SPFRNPQ---KLLQSDYLQG---VPCNG--HPLGH---HWVT---SLSDA-----
-----NPWSSSLASSPLDQ-----QDIKP-----GREDLQLG-AII--HHR-----
-----SPHVN-----HHSPTN---HPNA--WG-----ASP-AHN-SSLTSS-----
GQ-----PINIYSQPS-----FTVSGMLDHGELTPPLP-----AGT--TQSLHPVL--REPN-----
DHVDLGSHTC-----
QDHSDEETPTSDELEQFAKQFKQRRIKLGFTQADVGLALGTL----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLNKWLEEADSSTGNPTSIDKIAAQGRKRKRTSIEVSVKGVLETHFLKCPK
PAALEITSLADSLQLEKEVVRVWFCNRRQKEKRMTTP-----GD---PQQHEVYSHSV-----
-----KTDT-----SCNEL-----
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>Lo_Pou3f4

-----MATAASNPY-----SII---SSNSMVHTD-----
APVMQQG-----SPFRNHQ---KLLQSEYLQG---VPSNG--HPLGH---QWVT---SLTEG-----
-----SPWATSLAASPLEQ-----QDVKP-----GREDLQLG-AII--HHR-----
-----SPHVA-----HHSPTHN---HPGA--WG-----ATA-AHN-SSINTG-----
GQ-----PINIYAQPG-----FTVNGMLEHGGLTPPPA-----SGQ--TQSLHPGL--RDTP-----
EHAEIGAHHC-----
HDHSDEETPTSDELEQFAKQFKQRRIKLGFTQADVGLALGTL-----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLKNWLEEADSSTGSPSSIDKIAAQGRKRKKRTSIEVSVKGVLETHFLKCPK
PAAQEISSLADSLQLEKEVVRVWFCNRRQKEKRMTPP-----GE---PQQHEVYSHSA-----
-----STDSS-----SCRDL-----
--

>O1_Pou3f4

-----MATAASSPY-----TLL---SSSSMIHAD-----
SQAMQPA-----SPYRAHQ---KLLQSDYLQ---SVQSNQ--HPLGH---QWAT---SLSEG-----
-----SPWSTSMEQ-----QDIKP-----GREDLQLG--II--HHR-----
-----SPHVA-----HHSPHHNN---HPGG--WG-----TPVSHNNSITSG-----
-----QQINLYSQTG-----FTVNGMLDHGGLTPPS-----NPQ--GQGMHPGL--RDTLSP-----
EHSDLGGHHC-----
HDHSDEETPTSDELEHFAKQFKQRRIKLGFTQADVGLALGTL-----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLKNWLEEADSSTGSSSIDKIAAQGRKRKKRTSIEVSVKGVLETHFLKCPK
PSAQEISSLADSLQLEKEVVRVWFCNRRQKEKRMTPP-----GEPPIPPHEGPYSHSG-----
-----GDAS-----SCHDL-----
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>Tr_Pou3f4

-----MATAASSPY-----TLL---SSSPMIHPD-----
SQAMQPA-----SPYRGHQ---KLLQSDYLQ---SVQNNQ--HPLGH---QWAS---SLSEG-----
-----SPWSSSMEQ-----QDIKP-----GREDLQLG--II--HHR-----
-----SPHVA-----HHSPHHNNHGSHPGGA--WG-----TPVSHN-----
SSSV-----QQINIYSQAG-----FTVNGMLDHGGLTPPP-----NPQ--GQGMHPGL--RDTLSP-----
DHSDLGGHHC-----
HDHSDEETPTSDELEHFAKQFKQRRIKLGFTQADVGLALGTL-----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLKNWLEEADSSTGSSSIDKIAAQGRKRKKRTSIEVSVKGVLETHFLKCPK
PSAQEITSLADTLQLEKEVVRVWFCNRRQKEKRMTPP-----GE---PPPHDGPYSHSG-----
-----SAGDAS-----SCHDL-----
--

>Bf_Brn1-2-4

-----MATTTSLPS-----SPYIVSSTAAPIVTTQ-----
DDNMQVPSVSQ---ASYRDIQ---KLPTDYL-GQQQAVSNG--HPLSQAH-QWV---LPHTEG-----
-----SPWPSSLAAAAGIGVFTT-----ADIKQ-----GREELH-GA-IL--HHRP-----
-----QQQQQQQAQQQ-----QQQQQQQQQHPQIV-WN-----TPVTSahi-QMTSNG-----
SSPL-----LSSHAHSLSG-----YSVNGMV-----SP---GQQMHPVLQ-----
DHVPQDSPI PQH-----
HDNSDDDTPTSDDLEQFAKQFKQRRIKLGFTQADVGLALGTL-----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLQKWLEEADSSSGSPSSIDKIAAQGRKRKKRTSIEVTVKGALESHFLKQPK
PSAQEIAQLADSLQLEKEVVRVWFCNRRQKEKRMTPP-----ALNGPPGPPGSVPTTVS-----
-----SEVDRASALRPP-----SAEGIMQSAGLAAQNIAASLAQQ-----
--

>Sp_Brn1-2-4

-----METVISTPYSLSLSQADITP--SSNSLILSSA-----
TDHIHNNITSLSDNSMQSGQVNVMYQKLGNEFLQ---QQGGNG--LPLAHHGAQWVTGLSAPPHADPT-----
-----SHWAGV-PAHLLGHG-----QDIKP-NL---GQTRDEI-----NEL--HRS-----
-----GHSVQ-----SAAT--WN-----TGN-
AHMAMPMSMTMPMTTSSGGGPLGHTPTSAHPMYTY-----GAMNGMM-----SCAQQFGQ--
NGPMRG---VLGPGGGQLPSHNGS-----
ETVIEDDAPSSDDLEQFAKTFKQRRIKLGYTQADVGLALGTL----
YGNVFSQTTICRFEALQLSFKNMCKLKPLLAKWLEEADSTSGSPTS LDKIAAQGRKRKRKRTSIEVTIKGALENAFLKQPK
PSAQEI SALADGLQLEKEVVRVWFCNRRQKEKRMTPPLNGIGPGGMQSADSPPPGQAATGEHVLP HSTASGLHHHHHHHH
PVITSLSSHAAHIGPGSSPIHGPPASVSPPAVHSP ISSALTPHSQHQAQSVQ-----
--

>Hs_Pou4f1

-----MMSMNSKQPH---FAMHPTLPE-HKYPSLHSS-----
SEAIRRACLPTPPLQSNLFASLDETL LARAEALAAVDIAVSQGKSHPFKPA-TYHT-MNSVPCT-----
-----STSTVPLA-----HHHHH-----HHHHQALEPG-DLL--DHI-----
-----SSPSLALMAGAGGAGAAAGGGGAHDGPGGGGGPGGGGGPGGG-----PGGGGGGG-PGGGGG--
GPGGGLLGGSAHPHMHSLGHL SHPAAAAAMNP-----
SGLPHPLVAAAAHHGAAAAAAAAAAGQVAAAASAAA AVGA-----AGL---ASICDSDTDPR-
ELEAFAERFKQRRIKLGV TQADVGSALANLKI PGVGS-
LSQSTICRFESLTL SHNNMIALKPILQAWLEEAEGAQREKMNKPEL FNGGEKKRKRRTSIAAPEKRSLEAYFAVQPRPSSE
KIAAIAEKLDL KKNVVRVWFCNQRQKQKRMKFS-----AT-----Y-----

>Xl_Pou4f1

-----MMSMNSKQPH---FAMHPSLPE-HKYTSLHSS-----
SEAIRRACL PNPQM QGNIFASLDETL LARAEALAAVDIAVSQGKSHPFKPA-TYHT-MNSVPCS-----
-----SNTTVPLGHH-----HHHHH-----HHHHQALEPG-DLL--EHV-----
-----TSPSLALM-----ASTGHEGVGGGGGGG--GG-----GGGGGGGL-ISTSAH-----
-----QSHMHGLSHLSH---QAAMNT-----SALQHPGL--VASHHC-----
SGGQVASAVGAA-----AGL---ASICDSETDPR-
ELEAFAERFKQRRIKLGV TQADVGSALANLKI PGVGS-
LSQSTICRFESLTL SHNNMIALKPILQAWLEEAEGAQREKLNKPEL FNGGEKKRKRRTSIAAPEKRSLEAYFAVQPRPSSE
KIAAIAEKLDL KKNVVRVWFCNQRQKQKRMKFS-----AT-----Y-----

>Lo_Pou4f1

-----MMSMNSKQPH---FAMHPTLPE-PKYTSLHSS-----
SEAIRRACLPTPQLQSNIFASLDETL LARAEALAAVDIAVSQGKTHPFKPA-TYHT-MNSVPCT-----
-----STSTVPLAHH-----HHHHH-----HHHHQNL EPP-DLM--DHI-----
-----TSPSLT-----LMTSG---HDGTGGGG-----GGGGGSLI-STSAHP-----
-----HSHMHGLSH-----LSHQAM-----NMN--SPLTHHGL-----
LPGHHGGTQGASGLTN-----NGL---PSINDSDTDPR-
ELEAFAERFKQRRIKLGV TQADVGAALANLKI PGVGS-
LSQSTICRFESLTL SHNNMIALKPILQAWLEEAEGAQREKMSKPDIFNGGEKKRKRRTSIAAPEKRSLEAYFAVQPRPSSE
KIAAIAEKLDL KKNVVRVWFCNQRQKQKRLKFS-----ATH-----

>Dr_Pou4f1

-----MMSMNSKQPH---FAMHPSLPE-HKYTTLHSS-----
SEAIRRACLQTPQLQSNIFASLDETL LARAEALAAVDIAVSQGKSHPFKPA-TYHT-MNTVPCS-----
-----STSTVPLAHHHH-----HHHHH-----HHHHQNL EPP-DLM--EHI-----
-----TSPSLA-----LMP SA---HEGAGGG-----GGGGGGGLISTSAHP-----
-----HSHMHGLTH-----LSHQAM-----NMN--SPLSHHGL-----

LPGHHGGAHQGAPGLVNNGL-----PSINDSDTDPR-
ELEAFAERFKQRRIKLGVTQADVGGALANLKIPGVGS-
LSQSTICRFESLTLSHNNMIALKPILQAWLEEAEGAQREKMSKPDIFNGSEKKRKRTSIAAPEKRSLEAYFAVQPRPSSE
KIAAIAEKLDLKKNVVRVWFCNQRQKQKRLKFS-----
-----AAH-----