

PCHAS	-----MEEEEKYEYLPAYEFYSKLNENVAEE-----	26
PCHCB	-----MEEEEKYEYLPAYEFYSKLNENVAEE-----	26
PBANKA	-----MEEERYEHLPSYEFYNKLNENVSDE-----	26
PY17X	-----MEEERYEHLPSYEFYNKLNENVPDE-----	26
PKNH	-----MKKDPKYKDLPSQIYYDKLNEDIVQDDEENEPP---EVNEDHGEN	42
AK88	-----MGCYDPRYKDLPSQVYYAKLNEDIVEEEDD---GNEEHVENEYEVN	44
PCOAH	-----MKKDPKYKDLPSQKYDYDKLNEDIVEEEDDEEHEGNEEHEEHDEYGEN	46
C922	-MGVHRASTPNSMHWAKDSKYKDLPSQIYYDNLNEDIIEEEDDED-----	45
PCYB	-----MEKDPKYKDLPSYIYYDKLNEDIIEEDDE-----	29
PcyM	-----MEKDPKYKDLPSYIYYDKLNEDIIEEDDE-----	29
PVP01	-----MEKDPKYKDLPSQIYYDKLNEDIIEEEDD-----	29
PVX	-----MEKDPKYKDLPSQIYYDKLNEDIIEEEDD-----	29
PVL	-----MEKDPKYKDLPSQIYYDKLNEDIIEEEDD-----	29
PocGH01	MLQCGKLIHIYLFSSIPQDPKYEHLPSYIFYEQLNSDINEDD-----	41
PmUG01	-----MNNGFYKLDNTYNHLPSYKFYEQLNSDINEDD-----	33

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PCHAS	-----	26
PCHCB	-----	26
PBANKA	-----	26
PY17X	-----	26
PKNH	EEHEIND-----ELEGNEENE-----EHDEYGENEEH	69
AK88	EEQEVNEEEV-----	55
PCOAH	EENKVNEGNEENVEHEGNEGVEHEENEGNVEHEENEGNVEHEENEGNELNEEYEENELN	106
C922	-----	45
PCYB	-----	29
PcyM	-----	29
PVP01	-----	29
PVX	-----	29
PVL	-----	29
PocGH01	-----	41
PmUG01	-----	33

PCHAS	-----	26
PCHCB	-----	26
PBANKA	-----	26
PY17X	-----	26
PKNH	DEYEENEGNEENEGNEEHEENEHEENEHDE-----YEENEGN---	108
AK88	-----IEEQEVNEEEVIEEQEVNEVQE-----	78
PCOAH	EEYEENEVNEENEGNEGSEYEENEVNEENEVNEENEVNEENEGSEENEVNEENEGSEEN	166
C922	-----	45
PCYB	-----	29
PcyM	-----	29
PVP01	-----	29
PVX	-----	29
PVL	-----	29
PocGH01	-----	41
PmUG01	-----	33

PCHAS	-----DKEKPNKYW	35
PCHCB	-----DKEKPNKYW	35
PBANKA	-----DKEKPNKYW	35
PY17X	-----DKEKPNKYW	35
PKNH	-----EEHDEYEENEGNEEHDEYEE---NEEYAEHGRNDELEVNGKNGSAKNVYW	156
AK88	-----VNEEQEVNEEQEVNEVQEVN---KVEQVNKEHGVNGQSKGIEENVYW	122
PCOAH	EVNEENEGSEENEVNEENEGSEENEVNEENEVNEENEGNEGNEQHEVNEVNEGSKGSEKNVYW	226
C922	-----ENDGNDENESESESEENVYW	65
PCYB	-----NEETVENESESESEENVYW	48

PcyM	-----NEETVENESESEENVY	48
PVP01	-----E-----HEENEESQENVY	43
PVX	-----E-----HEENEESQENVY	43
PVL	-----E-----HEENEESQENVY	43
PocGH01	-----EEVSEYW	48
PmUG01	-----NE-SVY	39

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PCHAS	KRIEPIFEPSEVRDIVYKLQRNVTLLENRGEQDLYVKHCYDLNYWLYEQVYKSFNLNE	95
PCHCB	KRIEPIFEPSEVRDIVYKLQRNVTLLENRGEQDLYVKHCYDLNYWLYEQVYKSFNLNE	95
PBANKA	KRIEPIFEPSEWVREIVYKLHRNVTFLENENRDDDKLYGKHCYDLNYWLYEQVYKNSDLND	95
PY17X	KRIEPIFEPSEWVREIVYKLQRNVTFLENENRDGDKLYGKHCYDLNYWLYEQVYKNSGLND	95
PKNH	EAMKGSYEQTPWVRDVFFKLERNITELNGNSSEDILRKKHCYDLNYWLYEQVYENLNKNE	216
AK88	KAVQGSYEETPWVRDVFFKLERNLTQLNEGREEDSLSKKHCYDLNYWLYEQVYENLNKNE	182
PCOAH	EGMKGSYEETPWVRDVFFKLDRNLTEVNENRGEQDLYVKHCYDLNYWLYEQVYENLNKNE	286
C922	EAIEGSYEQTPWVRDVFFKLERNLTELNESREKDSLSKKHCYDLNYWLYEQVYENLNKNE	125
PCYB	EAIEGSYEQTPWVRDVFFKLERNLTELNESRDEDSLSKKHCYDLNYWLYEQVYENLNNE	108
PcyM	EAIEGSYEQTPWVRDVFFKLERNLTELNESRDEDSLSKKHCYDLNYWLYEQVYENLNNE	108
PVP01	EAIEGSYEQTPWVRDVFFKLERNLTELNESRGEQDLYVKHCYDLNYWLYEQVYENLNNE	103
PVX	EAIEGSYEQTPWVRDVFFKLERNLTELNESRGEQDLYVKHCYDLNYWLYEQVYENLNNE	103
PVL	EAIEGSYEQTPWVRD-----	58
PocGH01	DAIEPSFDRTPWVRDVFFKLERNLTMINENRAEDNFSKKHCYDLNFWLYEQVYKNFESNE	108
PmUG01	DSVEPSFDKTLWARDVFLKLERNVLSVNRNRIEDVFSKKHCYDLNYWLYEQVYKNFDHNE	99

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PCHAS	NSIHFFMTLDILLNSWENMNADQFNGEKDICQPDNTLIDINYLKEIKYLGDYVENFDTIK	155
PCHCB	NSIHFFMTLDILLNSWENMNADQFNGEKDICQPDNTLIDINYLKEIKYLGDYVENFDTIK	155
PBANKA	NLSFFITLDILLNSWENMNADKFNNGKDICQPDNTLVDINYLKEIKYLADYVENFETIK	155
PY17X	NLSFFITLDILLNSWENMNADKFNNGKDICQPDNTLVDINYLKEIKYLADYVENFETIK	155
PKNH	NDENFFKIIDDLOGAWKNINNDKFPNADNICHDPDKTLVDMKYLEVDKDLFDLIEDHSTIK	276
AK88	NDENFFKIIDGLOGAWKNINNDKFPNADNICHDPDTTLVDMKYLKDVKYLFDLVEDYSTIK	242
PCOAH	NDENFFKIIDDLOGAWKNINNDKFPNADNICHDPDKTLVDMKYLEVDKHLFDLIEDYSTIK	346
C922	NDENFFKIIDGLOGAWKNINNDKFPNADNICHDPDKTLVDMKYLKDVKNLFDLIEDFSTIK	185
PCYB	NDENFFKIIDGLOGAWKNINNDKFPNADNICHDPDKTLVDMKYLKDVKHLFDLIEDFSTIK	168
PcyM	NDENFFKIIDGLOGAWKNINNDKFPNADNICHDPDKTLVDMKYLKDVKHLFDLIEDFSTIK	168
PVP01	NDENFFKIIDGLOGAWKNINNDKFPNADNICHDPDKTLVDMKYLKDVKHLFDLIEDFSTIK	163
PVX	NDENFFKIIDGLOGAWKNINNDKFPNADNICHDPDKTLVDMKYLKDVKHLFDLIEDFSTIK	163
PVL	-----FPNADNICHDPDKTLVDMKYLKDVKHLFDLIEDFSTIK	95
PocGH01	NDENFYKTLDLLIEAWTNINNDKFPNADNICHDPDTLVDMEYLKEIKYLFDFIEDFIIK	168
PmUG01	KDENFYKTIDIFQDGWKRINNSEFPNEDNVCHPDHTLVDMEYLKDVKNLFDLIEDYVIK	159

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PCHAS	SAAIEDTNKACNVYIDYLRYAIPAYYEWNKLCLEENLCNKYIHDYKYPKGVLSNLS	215
PCHCB	SAAIEDTNKACNVYIDYLRYAIPAYYEWNKLCLEENLCNKYIHDYKYPKGVLSNLS	215
PBANKA	SAAIEDTNKACNAYIDYLRYAIPAYYEWNTVCTIEEENICNKYIRDYKYNPKGVLCNLS	215
PY17X	SAAIEDTNKACNVYIDYLRYAIPAYYEWNTVCTIDEENLCNKYIRDYKYNPKGVLCNLS	215
PKNH	AAAINDTKNACLKYIDYLKIKVPLYEYEWNNICTMEEENICTKYIDDYSKYDPKNVLENLS	336
AK88	AAAINDTKNACQKYIDYLKVKVPLYEYEWKDVCTMEEENICTKYIDDFSQYNPKSVLENLS	302
PCOAH	EAAINDTKNACQKYIDYLKITVPLYEYEWNGICTMEEQNICTKYIDDYSKYDPKNVMENLS	406
C922	TAAIKDTNRACQKYIDYLKLVPLYEYEWNSVCTMEEENICTKYIDDYPKYNPKNVLENLS	245
PCYB	TAAIKDTNACQKYIDYLKLVPLYEYEWNDVCTMEEENICTRYIDDYPKYNPKNVLENLS	228
PcyM	TAAIKDTNACQKYIDYLKLVPLYEYEWNDVCTMEEENICTRYIDDYPKYNPKNVLENLS	228
PVP01	TAAIKDTNACQKYIDYLKLVPLYEYEWNDVCTMEEENICTKYIDDYPKYNPKNVLENLS	223
PVX	TAAIKDTNACQKYIDYLKLVPLYEYEWNDVCTMEEENICTKYIDDYPKYNPKNVLENLS	223
PVL	TAAIKDTNACQKYIDYLKLVPLYEYEWNDVCTMEEENICTKYIDDYPKYNPKDVLENLS	155
PocGH01	TAAIKDTNACQKYIDYLKLVPLYEYEWKDLCTMEGDNICTRYIDDYVKNPKNVLENLS	228
PmUG01	AEVIRDTNACQKYIEYLKQKVPLYEYEWENVCTVEEDNICTRYIDDYTKYNPRNVLENLS	219

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PCHAS	VTGLAFAQLFNKCYKNIVSIFLSTNNASERTTIKLRNGLETISYGITESQGRSLSEVGIP	275
PCHCB	VTGLAFAQLFNKCYKNIVSIFLSTNNASERTTIKLRNGLETISYGITESQGRSLSEVGIP	275
PBANKA	VTGLAVAQLFNQCYKSIVNIFMNVNAPVVRTTIKLRNGLETISYGITENKGRSLYEVETA	275
PY17X	VTGLAFAQLFNQCYKSIVNIFINVNAPVVRTTIKLRNGLETISYGITENKGRSLYEVETA	275
PKNH	VVSLALASIFNDCYQNIINLFTAEKIEPRTVLKQRGITGESENNVKTGGRILAEHVSD	396
AK88	VVSLALASIFNDCYQNIINLFTAEKIEPRTVLKHRDITGQSESNIVKVGGRVLSEAILD	362

PCOAH	VVSLALASIFNDCYQNIINLFTAEKIEPRTVLKNRDITGQSENNAIKMGGRILAAAVGD	466
C922	VVSLALSSIFNDCYQDIINLFTKAEKIEPRTVLKVRDITGTSQSNVVKMGGRVLAEAIND	305
PCYB	VVSLALASIFNDCYQNIINLFTAEKIEPRTVLKHRGITGPSESNVVKIGGRALAEAISD	288
PcyM	VVSLALASIFNDCYQNIINLFTAEKIEPRTVLKHRGITGPSESNVVKIGGRALAEAISD	288
PVP01	VVSLALASIFNDCYQNIINLFTAEKIEPRTVLKHRDITGPSESNVVKIGGRALAEAISD	283
PVX	VVSLALASIFNDCYQNIINLFTAEKIEPRTVLKHRDITGPSESNVVKIGGRALAEAISD	283
PVL	VVSLALASIFNDCYQNIINLFTAEKIEPRTVLKHRDITGPSESNVVKIGGRALAEAISD	215
PocGH01	VVGLALASIFNDCYQNVINLFTAEKLPARTLLKHRNSVGKLESTIIKT-GRALAESGSD	287
PmUG01	VVGLSLASVFNDCYQNIITVFQESEKLPSTRTELKQRNALGQIESTVVKV-GRTLAEIGDD	278

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PCHAS	IEEKSDFFSPIIYFFNSIYSTISEIYINSYNDIILLIVLFSGILITFFGVNKITKIIKST	335
PCHCB	IEEKSDFFSPIIYFFNSIYSTISEIYINSYNDIILLIVLFSGILITFFGVNKITKIIKST	335
PBANKA	IEEPTDLLAYVIYILKSLYNTISEIYINNYNDIILLIVLFSGILVTCFGVHKITKIVKST	335
PY17X	IQEPADFLAYLIYILKSVYNTISEIYINNYNDIILLIVLFSGILITCFGVYKISKIVKST	335
PKNH	TSESANMLTGVNTLATSFPFMTKRISPCVFNQVLLVISFLSLLLFLVHSIYKFILIGKYI	456
AK88	IPESGNALVGINALATSFFSMFKRFNSYIYSMFAPVGLSLLSIVLFMYVVKFTPIGKTI	422
PCOAH	TYESGNRLIGINALGTSIFSMVKRFSSYVFSLIAPVGISLLCLLFFLYVLNKFTSIGKYI	526
C922	TSQSGNILIGINALVTSLSVVKRFNSYVFSLVAPVGVSLLSLFLFLCVLYKFTPIGKSI	365
PCYB	TPQSGNMLIGINALATSLSVVKRFNSYVFNLVAPVGLSLLSLLLFLYVLYKFTPIGKSI	348
PcyM	TPQSGNMLIGINALATSLSVVKRFNSYVFNLVAPVGLSLLSLLLFLYVLYKFTPIGKSI	348
PVP01	TSQSGNMLIGINALATSLSVVKRFNSYVFSLVAPVGLSLLGLLLFLYVLYKFTPIGKSI	343
PVX	TSQSGNMLIGINALATSLSVVKRFNSYVFSLVAPVGLSLLGLLLFLYVLYKFTPIGKSI	343
PVL	TSQSGNMLIGINALATSLSVVKRFNSYVFSLVAPVGLSLLGLLLFLYVLYKVKRMSG-	274
PocGH01	PMPSGSIFVGINAFVSSLFSVMKGFNSYVFNLVTPVSLLLGILMLFYILYKFSSLRQSI	347
PmUG01	GMQSGDIFIGVNDVFVYSIYAVKRLNSYVFDHFTTMNILLVILMALFIFCKFISGRSMS	338

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PCHAS	SNEQNRNQNTREEISL-----	351
PCHCB	SNEQNRNQNTREEISL-----	351
PBANKA	SSVQNRNQNTQAEISL-----	351
PY17X	SNVQNRNQNTQAEIPL-----	351
PKNH	FDTYKGVENKCTRCKSDDSEDEEEEEEEEEDEDDDE-----EEEGDEEDEDDEDD	509
AK88	YLNQKGMKNHYVRKNSDDSDDEDDDDDDDDNDNSANISH-----KNKKNNRGNRDN	476
PCOAH	SYTHKGVQNKCLRNKSDDEEDEDDEDDDEDDDDDDDDDDYDYIDEDDEDEDDEDD	586
C922	YHPHKRGKNI FVRNKTDLDDEDDDDEN-----S	395
PCYB	NLTHKRVKNKFVGNRSDDFDDDEDDDD-----	376
PcyM	NLTHKRVKNKFVGNRSDDFDDDEDDDD-----	376
PVP01	SRTHKRVKNKFVNRKRDDFDDDEDDDD-D-----	370
PVX	SRTHKRVKNKFVNRKRDDFDDDEDDDD-D-----	370
PVL	-----	274
PocGH01	YRTHKKIKNKFGRNKGKDEIGPLSDCSGSLDSHS-----	381
PmUG01	CNDSKXXX-----	346

PCHAS	-----	351
PCHCB	-----	351
PBANKA	-----	351
PY17X	-----	351
PKNH	DDSDSNSALKSSFRKWSLNSHS	532
AK88	DNNRDNNKDNNSSNVE-----	492
PCOAH	EDDSNNSGLKSSSSEEPNSHS	609
C922	DNNTDNNSDFKSSPSIESLNSHS	418
PCYB	-DDSDNNSDLKSSSSMESLNSHS	398
PcyM	-DDSDNNSDLKSSSSMESLNSHS	398
PVP01	-DDSDNNSDLKSSSSMESLLNS	392
PVX	-DDSDNNSDLKSSSSMESLLNS	392
PVL	-----	274
PocGH01	-----	381
PmUG01	-----	346