

GmPIN2a 100.0% MTRGDDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MNYHFIADSLQKVLLGAL LWMFTTRKGS ID
GmPIN2b 96.7% MTRGDDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MNYHFIADSLQKVLLGAL LWMFTTRKGS ID
GmPIN1b 55.9% MTRLDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MNLRFIADSLQK I ILLVAVNSNIARRGGL IE
GmPIN1c 56.3% MTRLDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MNLRFIADSLQK I ILLVAVNSNIARRGGL IE
GmPIN1a 55.7% MTRLDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MNLRFIADSLQK I ILLVAVNSNIARRGGL IE
GmPIN1d 54.6% MTRLDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MNLRFIADSLQK I ILLVAVNSNIARRGGL IE
GmPIN1e 52.5% MTRLDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MNLRFIADSLQK I ILLVAVNSNIARRGGL IE
GmPIN3a 53.5% MTRWGDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MNLRFIADSLQK I ILLVAVNSNIARRGGL IE
GmPIN3b 53.9% MTRWGDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MNLRFIADSLQK I ILLVAVNSNIARRGGL IE
GmPIN3c 50.8% MTRWGDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MNLRFIADSLQK I ILLVAVNSNIARRGGL IE
GmPIN3d 54.7% MTRWGDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MNLRFIADSLQK I ILLVAVNSNIARRGGL IE
GmPIN8a 27.8% MTRSLADYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MSLKLVADVWVKLAFVLEA IRIKIRGGGL IE
GmPIN8b 27.5% MTRSLADYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MSLKLVADVWVKLAFVLEA IRIKIRGGGL IE
GmPIN8c 28.9% MTRSLADYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MSLKLVADVWVKLAFVLEA IRIKIRGGGL IE
GmPIN8d 28.9% MTRSLADYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MSLKLVADVWVKLAFVLEA IRIKIRGGGL IE
GmPIN6a 38.6% MTRGDDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MDAKFIADSLQK I ILLVAVNSNIARRGGL IE
GmPIN6b 43.3% MTRGDDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MDAKFIADSLQK I ILLVAVNSNIARRGGL IE
GmPIN5a 24.5% MTRGDDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MDAKFIADSLQK I ILLVAVNSNIARRGGL IE
GmPIN5b 23.9% MTRGDDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MDAKFIADSLQK I ILLVAVNSNIARRGGL IE
GmPIN9c 42.9% MTRDREYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MNYHFIADSLQKVLLGAL LWMFTTRKGS ID
GmPIN9d 44.6% MTRDREYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MNYHFIADSLQKVLLGAL LWMFTTRKGS ID
GmPIN9a 46.0% MTRGDDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MNLRFIADSLQK I ILLVAVNSNIARRGGL IE
GmPIN9b 26.7% MTRGDDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MNLRFIADSLQK I ILLVAVNSNIARRGGL IE
consensus/100% MTRGDDYVWVA VPLYVAMILAY SVWKKIF SPQCSCGINRVAFA PLSFHFISNNPY MNYHFIADSLQKVLLGAL LWMFTTRKGS ID

GmPIN2a 100.0% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN2b 96.7% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN1b 55.9% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN1c 56.3% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN1a 55.7% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN1d 54.6% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN1e 52.5% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN3a 53.5% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN3b 53.9% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN3c 50.8% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN3d 54.7% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN8a 27.8% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN8b 27.5% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN8c 28.9% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN8d 28.9% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN6a 38.6% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN6b 43.3% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN5a 24.5% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN5b 23.9% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN9c 42.9% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN9d 44.6% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN9a 46.0% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
GmPIN9b 26.7% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG
consensus/100% WITTFISLSTLPNTLVWG PPLKAMYGDSSGLAVQVVLQCIWYLLDFEFERGA KLLITEQFPE-TAGSITSRFVSDSVVSLNGRE-PLQTDABIG

GmPIN2a 100.0% EDGKLVHVVRKSAASSMISSFNKSHLT---SMTPRASNLTGVEIYSVQSSREPTPRGSSFNQDFYAMFASKAPSPKHGYTNSFQSN-GGIGDVISLQS
GmPIN2b 96.7% EDGKLVHVVRKSAASSMISSFNKSHLT---SMTPRASNLTGVEIYSVQSSREPTPRGSSFNQDFYAMFASKAPSPKHGYTNSFQSN-GGIGDVISLQS
GmPIN1b 55.9% EDGKLVHVVRKSAASSRSDIFSRSSQGL---SSTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN1c 56.3% EDGKLVHVVRKSAASSRSDIFSRSSQGL---SSTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN1a 55.7% EDGKLVHVVRKSAASSRSDIFSRSSQGL---SSTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN1d 54.6% EDGKLVHVVRKSAASSRSDIFSRSSQGL---SSTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN1e 52.5% DDGKLVHVVRKSAASSRSDIFSRSSQGL---SSTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN3a 53.5% DDGKLVHVVRKSAASSRSDIFSRSSQGL---SSTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN3b 53.9% DDGKLVHVVRKSAASSRSDIFSRSSQGL---SSTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN3c 50.8% DDGKLVHVVRKSAASSRSDIFSRSSQGL---SSTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN3d 54.7% DDGKLVHVVRKSAASSRSDIFSRSSQGL---SSTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN8a 27.8% -----SFMTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN8b 27.5% -----SFMTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN8c 28.9% -----SFMTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN8d 28.9% -----SFMTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN6a 38.6% DHGRIHVRIRRSVSSAPETNSSIGGNT---TVVTPRQSNLSNADIFSIINTPLHLHEGGGNT---AAGASPHLSGYASSDAYSLQ-----AC
GmPIN6b 43.3% DQGRIRVRIRRSVSSAPETNSSIGGNT---AVVTPRPSNLSNADIFSIINTPLHLHEGGGNT---AAGASPHLSGYASSDAYSLQ-----AC
GmPIN5a 24.5% -----SFMTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN5b 23.9% -----SFMTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN9c 42.9% ENGELHVMVRSSSLKI---FNRSTEMCAHL---PKRRASSFSTLIDLQ-----AKKKGGE-----AKKKGGE
GmPIN9d 44.6% ENGELHVMVRSSSFLND---SPNCSTSNHCSEAEICMSQRSLSFNTRDLKREGSKEEMSKI DQEKMSRKD-----AC
GmPIN9a 46.0% ENQQLHVMVRSSMSRVS---MASSFHYSYSTGVEIYFPFSR---GVTVPAPNPFSSGLTQVAVNSNQTQP---QPQPQIQQAQVAPP-PQ
GmPIN9b 26.7% PSQRASSGASGFEEWMLNNKHEKRF---SRKNTVSDDLVISPSPKPIKFLGNSGGQRNKDMK-----AKKKGGE-----AKKKGGE
consensus/100% EDGKLVHVVRKSAASSMISSFNKSHLT---SMTPRASNLTGVEIYSVQSSREPTPRGSSFNQDFYAMFASKAPSPKHGYTNSFQSN-GGIGDVISLQS

GmPIN2a 100.0% SKGATPRTSNFEEMLKMKHKKRGRSSMSELFNGLVSSN---YPPNPMPFSGTSA-----GGP
GmPIN2b 96.7% SKGATPRTSNFEEMLKMKHKKRGRSSMSELFNGLVSSN---YPPNPMPFSGTSA-----GGP
GmPIN1b 55.9% SRGPTPRPSNYDEGD---GKPKFYHAA---GGTGHYAPNPMGFSPS-----NGSKSVAAANANA
GmPIN1c 56.3% SRGPTPRPSNYDEGD---GKPKFYHAA---GGTGHYAPNPMGFSPS-----NGSKSVAAANANA
GmPIN1a 55.7% SRGPTPRPSNYDEGD---GKPKFYHAA---GGTGHYAPNPMGFSPS-----NGSKSVAAANANA
GmPIN1d 54.6% SRGPTPRPSNYDEGD---GKPKFYHAA---GGTGHYAPNPMGFSPS-----NGSKSVAAANANA
GmPIN1e 52.5% SRQSNFGGDFEESG---GGMRVNG---GGVYGPANAGIFSPV-----AASK
GmPIN3a 53.5% SFRQSNFGGDFEESG---GGMRVNG---GGVYGPANAGIFSPV-----AASK
GmPIN3b 53.9% SRGVTPRPSNFEENGCSAGA---MQQQTSSPRFGYPAV---QTLPAAYPAPNPFSS---GLTQVAVNSNQTQP---QPQPQIQQAQVAPP-PQ
GmPIN3c 50.8% SRGVTPRPSNFEENGCSAGA---MQQQTSSPRFGYPAV---QTLPAAYPAPNPFSS---GLTQVAVNSNQTQP---QPQPQIQQAQVAPP-PQ
GmPIN3d 54.7% SRGVTPRPSNFEENGCSAGA---MQQQTSSPRFGYPAV---QTLPAAYPAPNPFSS---GLTQVAVNSNQTQP---QPQPQIQQAQVAPP-PQ
GmPIN8a 27.8% -----SFMTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN8b 27.5% -----SFMTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN8c 28.9% -----SFMTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN8d 28.9% -----SFMTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN6a 38.6% ---PTPRASNFNEME-----AKKKGGE-----AKKKGGE
GmPIN6b 43.3% ---PTPRASNFNEME-----AKKKGGE-----AKKKGGE
GmPIN5a 24.5% -----SFMTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN5b 23.9% -----SFMTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN9c 42.9% -----MKHESI-----AKKKGGE-----AKKKGGE
GmPIN9d 44.6% NHLNSGVKHESI-----AKKKGGE-----AKKKGGE
GmPIN9a 46.0% -----SFMTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
GmPIN9b 26.7% -----SFMTPRPSNLTGAEIYSLQSSRNPTPRGSSFNHDFYSMMAAGGRNSNFGASDVYGLS-----A
consensus/100% SKGATPRTSNFEEMLKMKHKKRGRSSMSELFNGLVSSN---YPPNPMPFSGTSA-----GGP

GmPIN2a 100.0% KKDDSGGGGAAAPNTNLELHMVFSSSSASPVSEGLRHRHVNRAASTDFGTVDPSKAVPHETVASKAVHELINENSPGRRNGDQRELMDEGAKFAISG
GmPIN2b 96.7% KKDDSGGGGAVPNTNLELHMVFSSSSASPVSEGLRHRHVNRAASTDFGTVDPSKAVPHETVASKAVHELINENSPGRRNGDREPEMDEGAKIPASG
GmPIN1b 55.9% NAKRPNQAQLKLEDGNDLHMFVSSSSASPVSDVF-----GAHEYGG-HDQ-----KEVKLVNPSGKVEN--HRDQTQEDYL-EKDEF SFGNRGM
GmPIN1c 56.3% NAKRPNQAQLKLEDGNDLHMFVSSSSASPVSDVF-----GAHEYGGHDQ-----KEVKLVNPSGKVEN--HRDQTQEDYL-EKDEF SFGNRGM
GmPIN1a 55.7% -----KKDDPNKDLHMFVSSSSASPVSDVF-----GAHEYGGHDQ-----KELKLVSPGKVEGNINRDQTQEDYL-EKDEF SFGNRGI
GmPIN1d 54.6% -----KGGEGGGGDLHMFVSSSSASPVSEGI-----HVFRGGGG-----DYGSDQLPVGVAHQKDYDFEG--HDEF SFGNRTV
GmPIN1e 52.5% -----SGGGGGGGDLHMFVSSSSASPVSEGI-----HAFRGGG-----DYGSDQLPVGVAHQKDYDFEG--HDEF SFGNRTI
GmPIN3a 53.5% PQVAQPAANSGNKSHDAKELHMFVSSSSASPVSEAGGLHVFSGADFASDQSGRSRQGAKEIRMLVADD--HFQNGETN-KAAAEFGEGEELKFPKAGE
GmPIN3b 53.9% PQVAQPAANSGNKSHDAKELHMFVSSSTSPVSEAGGLHVFSGADFASDQSGRSRQGAKEIRMLVADD--HFQNGETN-KAAAEFGEGEELKFPKAGE
GmPIN3c 50.8% -----KCAHDAKELHMFVSSSSASPVSEAGLNVFSSDTLGTSEQPDQG--AKEIRMLVADNNAHLRNGEANNKGGLEAVLGVDEDFKFFVNGG
GmPIN3d 54.7% -----NCAHDAKELHMFVSSSSASPVSEAGLNVFGNTELGTSQQPDQGG--AKEIRMLVADNNAHLRNGEANNKGGLEAGLDVEEFKFFVNGG
GmPIN8a 27.8% -----ARTFVVVPPSQDTPDSESS-----
GmPIN8b 27.5% -----ARTFVVVPPSQDTPDSESS-----
GmPIN8c 28.9% -----KRFPTAAASSQGGSC-----
GmPIN8d 28.9% -----KRFPTAAASSQGGSC-----
GmPIN6a 38.6% -----AGTFVGRSPVAGRVCRSSPVARVW-----ESPQKGLGDKRQCGCKDI
GmPIN6b 43.3% -----ASTVWGRSPVAGRCQSSPVARVW-----GSPQKGLGVERQCGCKDI
GmPIN5a 24.5% -----TTTATLKPAPKTMINDSEGGGKVEAT-----
GmPIN5b 23.9% -----TTTATLKPAPKTMINKEGGGKVEA-----
GmPIN9c 42.9% -----DTSSPKVIEDKEVKVIGCIQYPLSKGPK-----
GmPIN9d 44.6% -----DMSPLKAMGKVEGVNWNVOYPLSEGLK-----
GmPIN9a 46.0% -----EQTAVHELREIREGHEPVLGRRRLSLI-----
GmPIN9b 26.7% -----NGAFLNKDCHEVVFVSSSTSSPDSVNY-----TKHGVRVSGSADGTIETSEKVVLDLYHT
consensus/100%

GmPIN2a 100.0% SPFYTCQN-----QRKVDMEGNNANKNQMPASVMTLRLLMVWRKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN2b 96.7% SPFYTCQN-----QRKVDMEGNNANKNQMPASVMTLRLLMVWRKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN1b 55.9% DRENN-----QLEGEKVGDKG--PMTMPPASVMTLRLLMVWRKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN1c 56.3% DRENN-----QLEGEKVGDKG--PMTMPPASVMTLRLLMVWRKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN1a 55.7% EDEH-----EKEKVGNGN--PMTMPPASVMTLRLLMVWRKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN1d 54.6% ANGVDKEGP-----VLSKLGSSSTAELRPKQAQGAK--PMSMPPASVMTLRLLMVWRKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN1e 52.5% ANGVDKEGP-----VLSKLGSSSTAELRPKQAQGAK--PMSMPPASVMTLRLLMVWRKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN3a 53.5% EQAEEEGKK--AGPAGLNKLGSSSTAELRPKAAVAG--AGKMPPASVMTLRLLMVWRKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN3b 53.9% EQAEEEGKK--AGPAGLNKLGSSSTAELRPKAAVAV--AGKMPPASVMTLRLLMVWRKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN3c 50.8% EQVGEKEE--GLNGLNKLKLGSSSTAELRPKTAAGEASAG--KMPPANVMTLRLLMVWRKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN3d 54.7% EQVVEEKEKEKELNGLNKLKLGSSSTAELRPKAAALAAPAS--KMPPASVMTLRLLMVWRKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN8a 27.8% -----LEISKEEBEE--AHRKQSKIRMLLIVGKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN8b 27.5% -----LEISKEEBEE--AHRKQSKIRMLLIVGKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN8c 28.9% -----REVQSKREEDA--SPRIKRRKRVLLILVWVKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN8d 28.9% -----REVQSKREEDA--SPRIKRRKRVLLILVWVKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN6a 38.6% -----MSDKIEISFR-----TMSGACLSDLFIS-----SCVWMLMPSLILKASVITL
GmPIN6b 43.3% -----MSDKIEISFR-----DSTKVSQADPDLVASSQKPHFVWVHRLILVWVKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN5a 24.5% -----VVAIDVEMMLEBSVTSRILPECKVLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN5b 23.9% -----VDVKEEMLEBSVTSRILPECKVLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN9c 42.9% -----BVKIEKDAYKKQ--MHRASVVMVRLILVWVKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN9d 44.6% -----BEKIEEDYAYKKQ--QMPRSVVMVRLILVWVKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN9a 46.0% -----BEDDGNKQMPRVSVMILILVWVKLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
GmPIN9b 26.7% -----KLLPQKMMG-----VCPYFAYFVILDVDITLISLDELRYTRVFNMLLRNPNTYSSILGLAWSISFVWHIEMPTVWKSISITL
consensus/100%

GmPIN2a 100.0% SDAGLGMAFPSLGLFMAQPKLIACGNSVAAFSAVRFVAGPAVIAATSGVGLRGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN2b 96.7% SDAGLGMAFPSLGLFMAQPKLIACGNSVAAFSAVRFVAGPAVIAATSGVGLRGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN1b 55.9% SDAGLGMAFPSLGLFMAQPRVIACGNSVAAFSAVRFVAGPAVMAAASVAVGLRGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN1c 56.3% SDAGLGMAFPSLGLFMAQPRVIACGNSVAAFSAVRFVAGPAVMAAASVAVGLRGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN1a 55.7% SDAGLGMAFPSLGLFMAQPRVIACGNSVAAFSAVRFVAGPAVMAAASVAVGLRGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN1d 54.6% SDAGLGMAFPSLGLFMAQPKLIACGNSVAAFSAVRFVAGPAVMAAASVAVGLRGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN1e 52.5% SDAGLGMAFPSLGLFMAQPKLIACGNSVAAFSAVRFVAGPAVMAAASVAVGLRGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN3a 53.5% SDAGLGMAFPSLGLFMAQPKLIACGNSVAAFSAVRFVAGPAVMAAASVAVGLRGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN3b 53.9% SDAGLGMAFPSLGLFMAQPKLIACGNSVAAFSAVRFVAGPAVMAAASVAVGLRGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN3c 50.8% SDAGLGMAFPSLGLFMAQPRVIACGNSVAAFSAVRFVAGPAVMAAASVAVGLRGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN3d 54.7% SDAGLGMAFPSLGLFMAQPKLIACGNSVAAFSAVRFVAGPAVMAAASVAVGLRGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN8a 27.8% ASGGLGMAFPSLGLFMASSNRVITCCGRNTLVAMGLKFGPAIMAVASVIGLGRDLKVAITQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN8b 27.5% ASGGLGMAFPSLGLFMASSNRVITCCGRNTLVAMGLKFGPAIMAVASVIGLGRDLKVAITQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN8c 28.9% SNQGLGMAFPSLGLFMASSNTIACCPKRTVMVGLKVVGPALMAVASVIGLGRDLKVAITQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN8d 28.9% SNQGLGMAFPSLGLFMASSNTIACCPKRTVMVGLKVVGPALMAVASVIGLGRDLKVAITQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN5a 38.6% SDAGLGMAFPSLGLFMAQPRVIACGNSVAAFSAVRFVAGPAVMAAASVAVGLRGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN5b 43.3% SDAGLGMAFPSLGLFMAQPRVIACGNSVAAFSAVRFVAGPAVMAAASVAVGLRGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN5a 24.5% SKGAGGMAFPSLGLFMAQPKLIACGNSMTLIGLVKRFVAGPAATAGAVLGLGDVLRVITQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN5b 23.9% SKGAGGMAFPSLGLFMAQPKLIACGNSMTLIGLVKRFVAGPAATAGAVLGLGDVLRVITQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN9c 42.9% SQFAGGMAFPSLGLFMAQPKLIACGNSAAMSVIARLGGPAVIGVTSVIGRGGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN9d 44.6% SQFAGGMAFPSLGLFMAQPKLIACGNSVITISHVRFVAGPAVIAATSGVGLRGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN9a 46.0% SHQGLGMAFPSLGLFMAQPKLIACGNSVITISHVRFVAGPAVIAATSGVGLRGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
GmPIN9b 26.7% SNQGLGMAFPSLGLFMAQPKLIACGNSVITISHVRFVAGPAVIAATSGVGLRGVLLVAVTQAAALPQIVFVFVAEYVNHADILSTVIFGMILIAL
consensus/100%

GmPIN2a 100.0% PVTIYYVHLGL-----
GmPIN2b 96.7% PVTIYYVHLGL-----
GmPIN1b 55.9% PVTIYYVHLGL-----
GmPIN1c 56.3% PVTIYYVHLGL-----
GmPIN1a 55.7% PVTIYYVHLGL-----
GmPIN1d 54.6% PVTIYYVHLGL-----
GmPIN1e 52.5% PVTIYYVHLGL-----
GmPIN3a 53.5% PVTIYYVHLGL-----
GmPIN3b 53.9% PVTIYYVHLGL-----
GmPIN3c 50.8% PVTIYYVHLGL-----
GmPIN3d 54.7% PVTIYYVHLGL-----
GmPIN8a 27.8% PVALYYVHLGLSY-----
GmPIN8b 27.5% PVALYYVHLGLSY-----
GmPIN8c 28.9% PVALYYVHLGLSY-----
GmPIN8d 28.9% PVALYYVHLGLSY-----
GmPIN6a 38.6% PVTIYYVHLGL-----
GmPIN6b 43.3% PVTIYYVHLGL-----
GmPIN5a 24.5% PVTIYYVHLGLSY-----
GmPIN5b 23.9% PVTIYYVHLGLSY-----
GmPIN9c 42.9% PVTIYYVHLGL-----
GmPIN9d 44.6% PVTIYYVHLGL-----
GmPIN9a 46.0% PVTIYYVHLGL-----
GmPIN9b 26.7% PVTIYYVHLGL-----
consensus/100% PhIha...hLth...