>Amborella trichopoda ALP2 XP\_011621984 MQMHCPTIPGAHNWLDKLRSSKGFPLDNGLNLENFLKSSSPSPNPNFSGDVSPPLLCHSPENSLNLINASGFSATKRDPGAWFDIMTDVLSDLFNMEGSYDFRRLRDSRDRKNGRKQSRPRICALSAEELPNFSARNNADNNSGVGGGSRDDADVDISSCSRTEVTVIDTSIATWKSEKVIYRKAHVWKVRERKGNSCGKGRGGESLVLKKRRLGQNKKGQDGVGISASTECLDDQDRRFQRRQICLASPGRKGRATGLRGRQKDS

>Amborella trichopoda HDP2 XP\_006850986 MEEPAEHTPTNRREAHQKKIESDSIQTISRYTRSRAAPEWTLTEMLILVREVCSAEEECLGLSVYQKWKIVSENCGVLDVMRSANQCRRQWEMMLSDYKKIKEWELQSGIGSFWKVNVDQMKEVVGVLFLFDQELYDLINELLTTREAGPNSRADSGSEGLINLADDDGDNEFNSVLTAPKALNKAVRVRSTKKPKTTKPPPQARKIDKEHEIAEKLHENSQAIQEILQRSLAEDPCEKFTEAEINLKRQQADELVKAFGDLLGSLNQFVELVEQCD

>Arabidopsis thaliana ALP2 NP\_197838.2 MLSSIIDDKPASSTWLNRLRLNRGLTTDDDDASGNPLTLDDFLRRNHHTEIAATSSASDSPPSAPIPSDPELAESPSEEPVPGEWYGVMSDVLFELFNFSGSSKSSTIPGKKKLPRKQSNPRHCSLETPEDVVVPLVNQKSDDANCLPSVREFATSSSRSSYNKKPPAPEIRERRRSVVEGDGVDEEEEKGEKDLVGFSRSEVTVIDTSFKIWKSEKLVFRRRNVWKVREKKGKSRVVSKLKKLMKKKKKKKRKCDDVDDDDGGIARKKSKKMKISTSVSDNNPRYNVEEIHDEPESSNVSRRLLSKPRKEGSFGIHTSKKNSEAAAQGYRSLA

>Arabidopsis thaliana HDP2 NP\_194855.2 MEEGTSGSRRTRSQVAPEWAVKDCLVLVNEIAAVEADCSNALSSFQKWTMITENCNALDVSRNLNQCRRKWDSLMSDYNQIKKWESQYRGTGRSYWSLSSDKRKLLNLPGDIDIELFEAINAVVMIQDEKAGTESDSDPEAQDVVDLSAELAFVGSKRSRQRTMVMKETKKEEPRTSRVQVNTREKPITTKATHQNKTMGEKKPVEDMSTDEEEDETMNIEEDVEVMEAKLSYKIDLIHAIVGRNLAKDNETKDGVSMDDKLKSVRQQGDELIGCLSEIVSTLNRLHEVPQEIE

>Arabidopsis lyrata Harbinger Repbase HARB-2\_Aly MDDMNPFYHSSGFMNLLQSQQEDMSQFASGSTEVPAFFTSSQLSEEGSEEEGNEASDVKPKQSISRKKWTAKEDIVLVSAWLNTSKDPVIFTGNDQQGQSFWKRIAAYVAASPSLDGMPKREHAQCKQRWAKVNKIVTKFVGCFTHKTATTHKTSGQSEDDVMKLAHEIYYNDTKKNFTLDHAWRELKFDQKWCDQFTTTRGGKDNAKRRKCGDGNASSQPINVEDDSVMTRPPGVKAAKAKGRKSATVFTNEGKKPATGKGEAGQSVEHFQNLWELKEKDWDRKEKQSKYQMLESLLSRTEFTPLSDIDLFLKNKLITELWS

>Arabidopsis lyrata Harbinger Repbase Harb-3\_Aly MFDMDSRNPYTNPSSFLNLLSSQQDNPMPPPNQYAGFFTSFSAPWIDPNQAPTPAEEPVADRKSRRKWSPTEDVILISAWLNTSKDAVVSFTNEQKATAFWQRIADYFAASPKLRGLQKRAPLRCKQRWAKINEGVCKFVGSYFTEAATKQQTSGQNENDVVNLAHQIFYNDHKAKFTLEHAWRELRHDQKWCGSSFTTSKDSGSAKRKRFEXGSAQASCSMPVNIDEEEPRPAGVKAAKATAKAKAKTFTTXANWRRRQDSEGVTLYLGD

>Arabidopsis lyrata Harbinger Repbase Harb-6\_Aly MNPYTNSAGFMEMLTSQQERGSLNPNACESASPSIRLFTGESDLPAYSTQWTEATEATTQGGSAKAKSTPRKRNKWTSQEDLVLISAWLNFTTSKDAIVGNEQRGVAFWKRIAAYYAASPNISGEKKREPTHFKQRWAKINEQFTVCKFVGSFQAAAGQVSSGMNDDDLIKLAHQIFEADYDNKFNLEHAWRALRNFTEQKWCQEQSTKSTDKNKRRKVDSEASQAHNESQASQSRPAGVKAAKAKLKKFTPATTAPLVEEEGQAVERIQALWEIRQKEFALKQQEHAFRKELTNSKLLXSLFTLSKSDPLSEIEEELKNKLIRDILL

>Arabidopsis lyrata Harbinger Repbase Harb-7\_Aly MDSYPYSHGSGFVNLLTSQQEVHNLEANPYDDVPVFPFTSQADSPSQAAHKPKVKRGRRKWSPTEDVVLISAWLNTSKDPVIGNEQKGNAFTFWSRIANYYGASPNLKGVERREPDHIKQRWAKINDGVCKFVGSYEAALKQQFTSSGQNDDDVMKLAHQIFTNDYDAKFNLEHAWRELRHDQKWCSAPTTKPTGQFTSKRRKTKESVEPSSCQPLSHGVEEAMHRPIGVKAAKANAKKTVGEEGNGLSFTRLQGIWEISKKNFELKEKQSKHSMLDSLLAKTELSDTEIALKDKLINDMLSFTNA

>Medicago truncatula ALP2 XP\_003602376 MICSPRSNKPGSNWLDRLRSNKGIPTDDNLDLDTFILNLATHSPQPRPIKPLRHRPPITHDDPPLTTVLAHLFNPGAATITSKKCPRKQTNPKIFIPSSTIISTTTANAPAATGVDAAVDVENRGVEGEDGEEDFKGFTKSEVTVIDTSCPVWKVDKFVFRRNNVWKIRERKQKNKFVAKKKSKSTHELDIHGIGSSKDNTINTGGEKPVKKLKVI

>Medicago truncatula\_ HDP2 XP\_003588618 MTENTRDAVGSRRTRSQAAPEWTLTESLILLNEIAAVEADCSVNFSSYQQWDIISQNCAALDVDRNLAQCRRKWRSLLAEYEEVRRRRRAWNLDRELFDAVERVVKGREERGEVDRESDGELGNEERDVTVEIDMIGTGFKRKRPRSKVERNSVQKPKKYWPVEPSENLKEKQVPEEIHEEVPENNHMEEEFLKDFLEKKPKLKSPAKRRQKHIETPLQNLPEVDKHHDIEKPKPASVGNITNNSREENEEMLTLKLQELAIEIQEISAESADCKEANTENIEDYRTEFTRRQGDKLIARLGNFSNTLKQLCDLLQECK

>Metasequoia\_glyptostroboides OneKP NRXL-2008643 EARMNWLNRLRSAKGFPVEPGLRMEDFLNSTTSQDRSPALSCTKSCQVKTENGEAQGDEKGRARVKGATKKKSLAAVKEEKKDWLEMTNNALAELFCMRQDWKLDDMKKTKRKRKQDKPRICPSLDANSLSPLSANDDNIVERPGKASDKAVSTSSPLSAVNSVVAGAGKKEYDGEISPVKKRKGSRQLVEDSIDGSKRSNADISSSSCNSCTEVTLIDTSLSTWRSRKVMYKKGSIWKVGEKKAQSVS

>Oryza sativa ALP2 XP\_015643506.1. MPCCSAVLSAAAAAAAASRTPPWLHRLHAKGGLSFPSNLHIDDLLYGQHHALPHPPPPPPPPQPAKEPPPPTKPKHPKPKQQQHPPPPPPQKPPQGSTNLSLPNPSGSGSGNGNPPPSPQLQLSTVIADVFVTPSSAPPLIAPIKAFRKQNHPRPRPDKASRPSKENKDKASKVKVKKRRRSDRAADGDGERCSRTEVTVIDTSTDGWKAAKLLLRRGAVWKVRDKASGVSEPEDPTKMKRRAGLVSKIQRDREKQKQKEKEATSSGNIHASSGDGMKEPDGPIQALKRSRGPEPEPEII

>Oryza sativa HDP2 XP\_015626063 MAMDPDAAEWPCIIQALPALPPSPSSTGVPRLPTMVQALPAATDPPPAAARLRRGAEPPSPRRTRSGGAPEWTPAETLALVAEVAAVDDGWSRSVSAFQKWAIVAENLAASRGRAARGRGRGRAASECRRRWEALAAEYGVVRRWEVRGAGGYWRMSAAARRKAGLPADFDAEVYGAMEALTLVEEALLADATAGAGGAEIGEKSAAAAEVGEGDEVEAGEEDGNGDRGEVGEEDEGEVGEDGEEEDGNEMVEVEDDGNADDKDAQPDGGNAAASDDLEVCETGANNEGKKSQTDACELANKLQENAQHIHMLLKEEAGENENHNLAISSDSMETTRQKGDELIKSLGGLVSYLNQFTDLIKENGFENVVGMS

>Oryza\_sativa Pong DAA00397.1 MFDFLMLPSVSIGFASYVFRLYPTEGFVNFLQQNCLPQPQEGENFHLVGQTTNTMSTPPPTPQAAANNTVQIDIHEDAINDASAKKRSLRYWTHDEEERLASAWLNASKDPIHGNEKKGDTFWKEVTDEFNRKGNGKRTREINQLKVHWSRLKSSIGEFNDYWTKVTQMNTSGYDDDMLEKEAQQMYANTFGKPFALVHWWKILRKEPKWCAMIEKDKNKAEVVDIPDEQKRPIGREAAQAERNGKRKKDSMSEGIVILGDNIEKIIKVTQDRKLEREKVTEAQIHISNVNLKAAEQQKEAKMFEVYNSLLTQDTSNMSEEQKARRDKALQKLEEKLFAD

>Pilularia globulifera ALP2 OneKP KIIX-2008112 DMLSELFCMESCSSNSEAMKKRPRKQGNPKNCNIFPDLEPSCTAITSVDVPMEESNKNSSREIVSENPPTLLSAAATLEKVDIRSSSQGAMAADYALCQQKSSKKESVGFKRRKYNCDNDVILENQVYLIDTSVPGWKVEKLITRRGNSWKVQNKEASISREGSLGKPMKVPKRRARTMED

>Populus trichocarpa ALP2 XP\_002318455 MLCSVQTSKSSSNWLDRLWSNRGFNNNNDNNPSVPNPSSSPTTNASNSVINSNSESTHSDSDQIKVTATTATATTREISSSDNKDLFFIMNNVLSDLFNMGGVSDPVEESSRLSRKKEKVPRKQTKPKFCFISGNNSGNDSLDCVRKDRNVLAATGSLNSDKNSNNVDCGVVVDDDDDDEEDVEEDVEEEKGFGVGGDKELKGYSRSEVTVIDTSCQVWKFDKLVFRKKNVWKVRDKKGKSWVFGSKKRKGNDLESANGNGAKKKAKVSNLEVGSSKDVNDVQKQEDERREEEHKQMPEDLSQVPKKRFHFSRSPEKSIKSGSSVILIKTIPTSNKSGKNITKNRLKDNQRKNKT

>Populus\_trichocarpa HDP2 XP\_006371828 MADIEMEATQSITAINNKKRKKGNQDCKNSNSSRVLSTPRTRSQVSPEWTAKQALILVNEIAAVEKDCSKAVSTNQKWKIIVGNCVALGVTHPLSQCRSKWNSLVIEYNQIKKWDKESESRSDFYWSLGCERRKEFGLPENFDDELFKAIDDYMWSQKEQLDTDPDTDLQKADLLDVIANLERYVEENHQTCCTKEKPQTIPAEEELHEIQVKEKPQKRLRKEKPQIGNGDEKPKIYSGRKKMPSTEDMEQMMVEKLSENAEMIQAVVNGNLPEMADLEAADSNNIEGFKTDLIRSQGDKLIACLENIVNTMRQFPWLLQDATIASMTGIIGHKTAPSPSGLSTFSLFKALNFHMYCTGLNDNLWFRRPAPYPLGHGV

>Solanum lycopersicum ALP2 XP\_004235021 MLCSISTQKSAGSNWLDRLRSSKGFSFADNRNLEQFLTHQTPNGSDSLPSSTETEIRDSNNKDNTGSESSSDPIRPVNESVLPRDQAPAASHNSGDNEELCSVVTNVLSDLFCMGESTSFPKLSVKRGSRKQTNPRFCASSEINGDAVVEGGQRKEETESLDKCRVEIKDSQVKLLEEGHNLNLAEEEDKSNANLMGFSRTEVMVIDTSCAPWKFEKLLFRKKNVWKVRDKKSKTLNLGKKKRKVDVTSEDARGEKKRKFISGHNGYAEKGRECKSSVSEKLQLDDKLEGTCKRTSDSFGQASKKKQRYLKLKKASSSVVLIKSIPTSKKNGVGFAKNSLKPSHR

>Solanum lycopersicum HDP2 XP\_004245311 MERSGGSLRTRSQAAPDWTLHESVTLVNEMKATQIECGNSLASFQKWQSTVHNCNSLGVNRSLNQCKRRWESMLEQYNKVKPWESAYWDSFDEERKRELELPEQFDFELFNAIARYLSLEGEDGGGAETDPDTDPEAQQVQGNNAFLEIGPKRQRRRTKTKRYKIEERLNPWRRILNENRKYEQSKMGIKHEASIDAGLEAPRHENSSLEIKRETSSPEEMTELPNLSMVNKVKAEQFHVDNPEELMAATLRENAEMITAITEGNTMDDRDCSLAGLNNFDAGRLHLIRSQGNQLIDCLGKISDTLIQLCDAIHKK

>Vitis vinifera ALP2 XP\_004245311 MLCSISTGKSGSKWLDRLRSAKGFPTGNDDDLEHFLTHRDPNLSNSPITKPSDPKSISDSTCSDEKPVQDRSQPPETGEKEWFGIMSNVLAELFNMGDSNQIPKLSGKKSSRKQTNPKICLLSSVRQEDEVPATAPSSGDNSLTEMKDSNGEVKTVNQGKVDCLDAEEEKCNQDLSAYSRSEVTVIDTSCAVWKFEKLLFRKKNVWKVRDKKGKSRSIGRKKRKASECDEQLEARKKMKLSVESFKERNEEESAMPSNEEQNPHNAKKEECKETSDGLSQVPKKRSPFSRLPRKSREGGSPVILVRGSKKTGANLPKITLKDTSRRHKA

>Vitis vinifera HDP2 CBI20803 MEQGEGHQSRVSSSRRTRSQLAPDWTINDSLILVNEIAAVEGECLNALSTYQKWKIIAENCTALDVSRTFNQCRRKWDSLLFEYNKIKKWESRSRNVSFWTLESERRRELGLPVDFERELFKAIDDLVSSQEVRSDTDPGTDPEAEDDRLEVIAEYGPKKQKRREMPQKTTSLEEKEQMMVMKLRENADLIDAIVKGNLVDSVDFGLGGSKNRETLQADFKRRQGDKLIACLRDIADTLDQLRDIVQKCG