**Table S3.** Protein sequences of HD-Zip I in *Salvia miltiorrhiza*, *Arabidopsis thaliana*, *Nicotiana tabacum*, *Oryza sativus*, *Zea mays*, and *Sesamum indicum*

***Salvia miltiorrhiza***

>SmHD-Zip1

MKLAKELGLQPRQIAVWFQNRRARWKGKQLERLYDALKQEFDAVSREKHKLHQEVLALRAILKDQVAKKQVSTDVSGEETVESTSIPSSEKGRGEGNNQMGECNYVLNVEDYSPLIMTPYN

>SmHD-Zip2

MVSFEQSRGERSNRSRQSDCDDEDSDSCFHRPPEKKRRLTAEQVQFLEKSFAVENKLEPDRKNELAKKLGLQPRQVAIWFQNRRARSKTKVLEREYGSLKSCYDKLKADYDTLFSDNEKLKNEVRLLSGKLLQKGNDEISPLDAAPCKQEDASSHSSHVLEASDFEQGDEDDECLVQRLCLPKLEAEYYDDHLQPNSCNLGFPVQNQGTWFWQC

>SmHD-Zip3

MKSSPVFDVADALLNDERIPSDALWIPNSSPSLHAMVSFEQSRGERSNRSRQSDCDDGDSDSCFHHPPEKKRRLTAEQVQFLEKSFAVENKLEPDRKNELAKKLGLQPRQVAIWFQNRRARSKTKVLEREYGSLKSCYDKLKADYDTLFSDNEKLKNEKGNDEISPLDAAPCKQEDASSYSSHVLEASDFEQGDEDDECLVQRLCLPKLEAEYYDDHLQPNSCNLGFPVQNQGTWFWQC

>SmHD-Zip4

MEGGGVYDDSRMPNHLLKSESSEVLDSLWVPNSSPSFQGSASMVSFEGENINVKAENCNDEFDPCFQQPEKKRRLSHDQVQFLEKSFEVENKLEPERKIQLAKEVGLQPRQVAIWFQNRRARYKTKVLEKEYAALKASYDKLTSDYDALFKENDNMRNQVNLLTEKLLRKSPSAKKEEAASSAVFDSESQSATLEPADSSHVEASDFSQDEDDTLSRSLMPPSCFPKLEIECYDDLQPNSCNLGFPVQDQVQGTWFWQY

>SmHD-Zip5

MTCSTEMAFFHPNFMLQTPHQDHDHTHPSTSLPPLIPSSTPQDQYHGVGSLIGKRSNVCLEEMMKNENENVQDELSDDGSQIGEKKRRLNLEQVKTLEKNFEVGNKLEPERKMQLARALGLQPRQIAIWFQNRRARWKTKQLEKDYDLLKRQFDAVKAENDALQAHNHKLHAEIMALKSREATDLCINLNKETEGSCSENSSEIKLHISTAPPDPKLDQTVKEESLCNMFCGMDDQPGFWPWLDQQNFKF

>SmHD-Zip6

MAYVPAESMFRNHDVDAHFPSSSPQDFHGVPEFLMRRSMSFSGMDRAEDDEGSDDGSQMLGEKKRRLNLEQVKALEKSFELGNKLEPERKMQLARALGLQPRQIAIWFQNRRARWKTKQLEKDYDILKRQFEALKADNDSLKSQNKKLQNQLSGMKRRGEAGAGAGAINLNKENEGSWSNGSDTSCEVNLKASTEYNQRSKHAAAAMFPAAATLAHHSLPAECFGNMFGGIEETPQEFWPWSEQQNFH

>SmHD-Zip7

MAGREFANSGGGALDLSKKMKTCGHDRPLDSVFASAPSNSFLGPGAMVSFGAVGRDNSSGNSFYQSFEMQENGEEYLDDYFSQPEKKRRLSVDQVQFLERSFEVENKLEPDRKLQLANELGLQPRQIAVWFQNRRARCKTKHLETEYETLHSSYKSLKMDYDYLVKENEKLKAEVLHLKHDGTAQDVEHASSGESDTKELSEAIPVSTDEEDHKVSVSTSKNDEQSSTKSDVTNEDSPRLTDGIHHPLFVKSGESPHDFDPSQSVLSLHGEDCLNEEMLQRAYVFPKIEDAYCHPHATSCGYGFSVEDHAFNFWSY

>SmHD-Zip8

MESGRIFFEPSCQNNMLFLGNADSGFRVGGRTVINMEESSKRRPFFSSAEELYDEDYFDEQLPEKKRRLTPEQVHMLEKSFEAENKLEPERKTQLAKKLNLQPRQVAVWFQNRRARWKTKQLERDYDQLKSSYDSLLCNYDSILKENDKLKSELLSLTEKLQPEETAGELSQKPDPVAAADTVQPCLELTVKVEDRLSTGSDGSAVVDDDGRQLLDSGDSYFPDNDYPDCMAAVDGINSEEDDGSDDGRSYFTDVFAVAEQQEPIGWCIWS

>SmHD-Zip9

MDWNGNIKMPYVSRPVDTSNFSSLYNCSFDHFPGLEMKQQTMLPMIMNKNMNMNMNMNNLGVDPKKKRLSNEQLELLENSFHEEIKLEPDRKMKLAKELGLQPRQIAIWFQNRRARWKGKRLEHLYDALKQEYDAVARDKHKLQQEVIALRAILKDQVAKKLVLSTGYTDISGEETVESTSIPSSDNHPPAAAAPVAGLHQIEECNYTLNMADYNNTMAATPPYWATSMPSCP

>SmHD-Zip10

MYKNSKAHGVDKLTCGLASGLDLSTSLARTHTRAPPPTIDRSIDRTDDDVAAGRAGRVGSPELAGLWCYIQRDEVVLPLGKIRLTEEHYRGDNLLAGRDSSRLDLKIIFSAVDTRSRNGSHRRQYGWLHHLCNHRFNHVVNIFLVCINGASSSTSRTIGLAEKPSTFSGKNFKYWQEKMLFYLTTVGFAGFLMEDKPPTPSEGEGETSQEIRAGYLNWCRGDYLCRNTVLMSLDERLYRVFKHIMDWNGNLRMPFVSRPADTSNFNFLYNCATFDHFPEMKQQSETMMEKSMNNLGVDPKKKRLSNEQLELLEISFQEEIKLDPDRKMKLAKELGLQPRQIAIWFQNRRARWKGKQLERLYDALKQEYDAVSRDKQKLQQEVMALRAILKDQVGKNQVSTGYTDISGEETVESTSIPSSDPTATATAAEEAMTAAASLHQMAECNYPMNMEDYNNTVMIAPYWATSMPSCP

>SmHD-Zip11

MKRLSSSDSLGGLMSICPNSTVDVDEHNHGGNPMYTREFQTMLEGLEEEESGQISEKKRRLSVDQVKALEKNFEVENKLEPERKVKLAQELGLQPRQVAVWFQNRRARWKTKQLERDYGLLKANHEALKHKYESLHRENQSLLNQIRELNGKIGVKEEASVSESEEKCDVEIDEGGGAMEHQENEMMGAVFGDFKDGSSDSDSSAILNEDNNSPITSPAGSSTTTALTADSRRPRRVLL

>SmHD-Zip12

MSTSIKKGTKNSRRKRFSDDQIKSLETMFETEARPELHLKQHLANKLGLQPRQIAIWFQNKRARSKSKQIEQEYSVLKSNYDNLALQFEALRKENQTLLVQVQKLRKMADNKDCEENDKNQIKLAASEIPRLLLDISGDELCMPLCSELNGREDYLEEEADVLNMAQIAESSLASPENGCSLESCTFLDNTGGTAQWWDF

>SmHD-Zip13

MKRLSNSDSLGGLMSICPNATEEESNNPMYAREFQTMLEGLEEEESGHVSEKKRRLSVDQVKALEKNFEVENKLEPERKVKLAQELGLQPRQVAVWFQNRRARWKTKQLERDYGGLKASYDGLKLNFERLQRDNESLLKELNGDDEEKTRLESEIGGAEAEMENPEGGKKEEASWPKFGDGSSDSDSSAILNEENIGFQLGAPQLVKIEEHNFFGEESCSTLFSDDQPPSLPWYCNDQWD

>SmHD-Zip14

MSXPRLKNIALPRHCSPSADAAAPKSTRAAVQPHVSEKKRRLSVDQVKALEKNFEVENKLEPERKVKLAQELGLQPRQVAVWFQNRRARWKTKQLERDYSGLKASYDGLKLNFERLQRDNESLLKEIRELKSKLNGDDEEKTRLESEIGDAVLRRAGAAEERGRGRGLPRAEGEHKLADVDVGEVEEEDVHVRAGEIQARDGAGRYQAEAGQAGGEAHCPGEGRALAARARAGKGSDAD

>SmHD-Zip15

MIYSGMEMKQAMVAEKSNSNSSMSINYGGGDPKKKRLSTEQLESLENSFQEEIKLDPDRKMKLAKELGLQPRQIAVWFQNRRARWKGKQLERLYDALKQEFDAVSREKHKLHQEVLALRAILKDQVAKKQVSTDVSGEETVESTSIPSSEKGRGEGNNQMGECNYVLNVEDYSPLIMTPYNWGALP

>SmHD-Zip16

MMASSPQKTPPKNKTKTHHHHHHHPRRFSEDQIKSLESIFEQESKLEPKKKLEIARDLSLHPRQVAIWFQNKRARWKSKRIEQEFIHLKSTYDALSISFDALKREKHSLQMQLQELNDRLKNRGDRINDDDEDERIITSCFDGQEFLKRGEEVMSQTWRNLSDSGVLFHDSSENPNWWET

>SmHD-Zip17

MDWNGNIKMPYVSRPVDTSNFSSLYNCSFDHFPGLEMKQQTMLPMIMNKNMNMNMNMNNLGVDPKKKRLSNEQLELLENSFHEEIKLEPDRKMKLAKELGLQPRQIAIWFQNRRARWKGKRLEHLYDALKQEYDAVARDKHKLQQEVIALRAILKDQVDKKLVLSTGYTDILGEEQLKAHPFQAPTTTLPRRQRRWRAFTRLRNATTH

>SmHD-Zip18

MYKDGNCKLIINIVGVASLLAKRPQTMAFSSGIEEEMHNNNNGGGSVGDDDFSDDGSQIGEKKRRLNMEQVKTLEKNFELGNKLEPERKMQLARALGLQPRQIAIWFQNRRARWKTKQLEKDYEILKRQFEAVKAENDALHSHNHKLHAQIVALKNREPTESINLNKETEGSCSNRSENSSENVKLDISRTQAIDSPISGRQLFPPSLRPAAAQQLFHNSKMEHAVKEESLCNMFVGMDDQTGFWPWLEQQQFN

>SmHD-Zip19

MAGSAAVYGGGDAPNQAKKRNFDQPLDSIAAESSLGSNTMLNFGAVGGVKRSRNMLFSSLDQEEFGEEYLDEYFNQQEKKRRLTADQVQFLERSFEADNKLEPERKVQLANELGLKPRQIAVWFQNRRARWKTKQLETDYETFHARYETLKSDYDNLVKENDKLKAEVLRLKQNDVGGDTEKVNLHLLDNKGLPKAMPREANARVISEDEESNGSVFAFKNEEQSSAKSEASNVGSPRLTDGIHSPLLESGITSHAFDRDYSDSSQIGEDNLHEEPDYVFPLSSFYYDGFPVEDHAFNFW

>SmHD-Zip20

MGFDDLCNTGLVLGLGFSSSASKKPSKNLEPSLTLSLSGETYDLAVKKADSDNNLYRQDSAASSFSNVSVKREREMGSEEVEIERRVSDEDDDGPNGRKKLRLTKTQSALLEESFKQHSTLNPKQKQDLARELKLRPRQVEVWFQNRRARTKLKQTEVDCEFLKKCCETLTDENRRLQKELQELKALKLAQPLYMQLPAATLTMCPSCERIGGAAADNTAKTSYVTKPHFYNPFTNPSAAC

>SmHD-Zip21

MEILNPNSTCLELSIAMPGFSSSPSSSEAKGEMKLLDMNEAPSRSEEECVEEEDEDCPYGGGGPIPRKKLRLTKDQSRRLEQSFLQNQALNPKEKEALAVELRLKPRQVEVWFQNRRARSKMKQTEIECEYLKRWLGALTEQNRKLQKEVEELRFIKAAPPPRQVSALTMCPRCERTTLLDKGRATTAAASEGKVPFLRHSSDPLVIYK

>SmHD-Zip22

MENCHSAPFCLELTIGFSSSSFLSPGESTMKELDINQVPSSGTEEECMEEEEEGESPNGGPARRKKLRLTKEQSRLLEESFKQNHTLNPREKETLAEILSLKPRQVEVWFQNRRARSKLKQTEMECEYLKRWFGSLSEQNRKLHKEVEELRAINVHGHGHLPPPASALSMCPRCERVTAAANTKMSHLRHRQPPAACFL

>SmHD-Zip23

MSIKGWQWAGSGPDPAWSRSRSVFLCLDPDPVQIHWIQKNEIQTQIHEIHWISGPDPDPYCALAKQLNLRPRQVEVWFQNRRARTKLKQTEVDCEYLRRCCENLTEENRRLQKEVNELRALKLSPQLYMNMSPPTTLTMCPQCERVAVSSSSTLRLRVLCSAHVETGDFTLLCSAADRRWGRPALQQTGGGRRPEVGKAGGADTGGWVSRAIGAWRIGERRRWDGRSRVSNLKWNFKL

>SmHD-Zip24

MGVDDDSCQTRLVLGLGIRSSAENSKKSLSSSPSLTLTLFGETINKRVDVCSNDSAASSLSNASVKREREVGSEEVDETERVSSRGSDEDDDGSNGRKKLRLTKTQSALLEESFKHHSTLNPKQKQDLAMELKLRPRQVEVWFQNRRARTKLKQTEVECELLKKCCETLTDENRRLQKELHDLKLAPPLYMKLPAAATLTICPTCERFSSSGGGAAENATKSPFAKPHFYNHFTNPSAAC

>SmHD-Zip25

MKKMSRSDKRRFSDEQIRRLEVIFEAESKLEARKKAEVARELGLQPRQVAIWFQNRRARWKSKHIEKEYAALLANYNALAAEFDSLKKEKHSLLNQLEKLKGKGDDDEEGGSGARCGGESESVKTNDFEVKNEGMVSVSDEEEMLRMVETTSDWGGLDCDDIIIDQSSSYQWWGFWS

***Arabidopsis thaliana***

>ATHB1

MESNSFFFDPSASHGNSMFFLGNLNPVVQGGGARSMMNMEETSKRRPFFSSPEDLYDDDFYDDQLPEKKRRLTTEQVHLLEKSFETENKLEPERKTQLAKKLGLQPRQVAVWFQNRRARWKTKQLERDYDLLKSTYDQLLSNYDSIVMDNDKLRSEVTSLTEKLQGKQETANEPPGQVPEPNQLDPVYINAAAIKTEDRLSSGSVGSAVLDDDAPQLLDSCDSYFPSIVPIQDNSNASDHDNDRSCFADVFVPTTSPSHDHHGESLAFWGWP

>ATHB3

MYMYEEERNNINNNQEGLRLEMAFPQHGFMFQQLHEDNAHHLPSPTSLPSCPPHLFYGGGGNYMMNRSMSFTGVSDHHHLTQKSPTTTNNMNDQDQVGEEDNLSDDGSHMMLGEKKKRLNLEQVRALEKSFELGNKLEPERKMQLAKALGLQPRQIAIWFQNRRARWKTKQLERDYDSLKKQFDVLKSDNDSLLAHNKKLHAELVALKKHDRKESAKIKREFAEASWSNNGSTENNHNNNSSDANHVSMIKDLFPSSIRSATATTTSTHIDHQIVQDQDQGFCNMFNGIDETTSASYWAWPDQQQQHHNHHQFN

>ATHB5

MKRSRGSSDSLSGFLPIRHSTTDKQISPRPTTTGFLYSGAGDYSQMFDALEDDGSLEDLGGVGHASSTAAEKKRRLGVEQVKALEKNFEIDNKLEPERKVKLAQELGLQPRQVAIWFQNRRARWKTKQLERDYGVLKSNFDALKRNRDSLQRDNDSLLGQIKELKAKLNVEGVKGIEENGALKAVEANQSVMANNEVLELSHRSPSPPPHIPTDAPTSELAFEMFSIFPRTENFRDDPADSSDSSAVLNEEYSPNTVEAAGAVAATTVEMSTMGCFSQFVKMEEHEDLFSGEEACKLFADNEQWYCSDQWNS

>ATHB6

MMKRLSSSDSVGGLISLCPTTSTDEQSPRRYGGREFQSMLEGYEEEEEAIVEERGHVGLSEKKRRLSINQVKALEKNFELENKLEPERKVKLAQELGLQPRQVAVWFQNRRARWKTKQLEKDYGVLKTQYDSLRHNFDSLRRDNESLLQEISKLKTKLNGGGGEEEEEENNAAVTTESDISVKEEEVSLPEKITEAPSSPPQFLEHSDGLNYRSFTDLRDLLPLKAAASSFAAAAGSSDSSDSSALLNEESSSNVTVAAPVTVPGGNFFQFVKMEQTEDHEDFLSGEEACEFFSDEQPPSLHWYSTVDHWN

>ATHB7

MTEGGEYSPAMMSAEPFLTMKKMKKSNHNKNNQRRFSDEQIKSLEMMFESETRLEPRKKVQLARELGLQPRQVAIWFQNKRARWKSKQLETEYNILRQNYDNLASQFESLKKEKQALVSELQRLKEATQKKTQEEERQCSGDQAVVALSSTHHESENEENRRRKPEEVRPEMEMKDDKGHHGVMCDHHDYEDDDNGYSNNIKREYFGGFEEEPDHLMNIVEPADSCLTSSDDWRGFKSDTTTLLDQSSNNYPWRDFWS

>ATHB12

MEEGDFFNCCFSEISSGMTMNKKKMKKSNNQKRFSEEQIKSLELIFESETRLEPRKKVQVARELGLQPRQVAIWFQNKRARWKTKQLEKEYNTLRANYNNLASQFEIMKKEKQSLVSELQRLNEEMQRPKEEKHHECCGDQGLALSSSTESHNGKSEPEGRLDQGSVLCNDGDYNNNIKTEYFGFEEETDHELMNIVEKADDSCLTSSENWGGFNSDSLLDQSSSNYPNWWEFWS

>ATHB13

MSCNNGMSFFPSNFMIQTSYEDDHPHQSPSLAPLLPSCSLPQDLHGFASFLGKRSPMEGCCDLETGNNMNGEEDYSDDGSQMGEKKRRLNMEQVKTLEKNFELGNKLEPERKMQLARALGLQPRQIAIWFQNRRARWKTKQLEKDYDTLKRQFDTLKAENDLLQTHNQKLQAEIMGLKNREQTESINLNKETEGSCSNRSDNSSDNLRLDISTAPPSNDSTLTGGHPPPPQTVGRHFFPPSPATATTTTTTMQFFQNSSSGQSMVKEENSISNMFCAMDDHSGFWPWLDQQQYN

>ATHB16

MKRLSSSDSMCGLISTSTDEQSPRGYGSNYQSMLEGYDEDATLIEEYSGNHHHMGLSEKKRRLKVDQVKALEKNFELENKLEPERKTKLAQELGLQPRQVAVWFQNRRARWKTKQLEKDYGVLKGQYDSLRHNFDSLRRDNDSLLQEISKIKAKVNGEEDNNNNKAITEGVKEEEVHKTDSIPSSPLQFLEHSSGFNYRRSFTDLRDLLPNSTVVEAGSSDSCDSSAVLNDETSSDNGRLTPPVTVTGGSFLQFVKTEQTEDHEDFLSGEEACGFFSDEQPPSLHWYSASDHWT

>ATHB20

MYVFDPTTEAGLRLEMAFPQHGFMFQQLHEDNSQDQLPSCPPHLFNGGGNYMMNRSMSLMNVQEDHNQTLDEENLSDDGAHTMLGEKKKRLQLEQVKALEKSFELGNKLEPERKIQLAKALGMQPRQIAIWFQNRRARWKTRQLERDYDSLKKQFESLKSDNASLLAYNKKLLAEVMALKNKECNEGNIVKREAEASWSNNGSTENSSDINLEMPRETITTHVNTIKDLFPSSIRSSAHDDDHHQNHEIVQEESLCNMFNGIDETTPAGYWAWSDPNHNHHHHQFN

>ATHB21

MNNQNVDDHNLLLISQLYPNVYTPLVPQQGGEAKPTRRRKRKSKSVVVAEEGENEGNGWFRKRKLSDEQVRMLEISFEDDHKLESERKDRLASELGLDPRQVAVWFQNRRARWKNKRVEDEYTKLKNAYETTVVEKCRLDSEVIHLKEQLYEAEREIQRLAKRVEGTLSNSPISSSVTIEANHTTPFFGDYDIGFDGEADENLLYSPDYIDGLDWMSQFM

>ATHB22

MEYWSSSFIDGASSSSFISPFYNFDHFSGNQDNRCLGTMMGAQQDILHVPLAMVESGYGEESNSFNGQEKKKKKMTSEQLKFLERSFQEEIKLNPDRKMKLNPDRKMKLSKELGLQPRQIAVWFQNRKARWKNKQLEHLYESLRQEFDIVSREKELLQEELIQLKSMIREDSSCKKKQTWEKACS

>ATHB23

MSCNNNGLAFFPENFSLQNHHQEEEDHPQLLQDFHGFLGKRSPMNNVQGFCNLDMNGDEEYSDDGSKMGEKKRRLNMEQLKALEKDFELGNKLESDRKLELARALGLQPRQIAIWFQNRRARSKTKQLEKDYDMLKRQFESLRDENEVLQTQNQKLQAQVMALKSREPIESINLNKETEGSCSDRSENISGDIRPPEIDSQFALGHPPTTTTMQFFQNSSSEQRMVKEENSISNMFCGIDDQSGFWPWLDQQQYN

>ATHB40

MNYTVDDQNMAFISQLYPDVYTQIVQPVGEVKQPKRRRKKTKGSVASADGGNGLFRKRKLTDEQVNMLEMSFGDEHKLESERKDRLAAELGLDPRQVAVWFQNRRARWKNKRLEEEYNKLKNSHDNVVVDKCRLESEVIQLKEQLYDAEREIQRLAERVEGGSSNSPISSSVSVEANETPFFGDYKVGDDGDDYDHLFYPVPENSYIDEAEWMSLYI

>ATHB51

MEWSTTSNVENVRVAFMPPPWPESSSFNSLHSFNFDPYAAGNSYTPGDTQTGPVISVPESEKIMNAYRFPNNNNEMIKKKRLTSGQLASLERSFQEEIKLDSDRKVKLSRELGLQPRQIAVWFQNRRARWKAKQLEQLYDSLRQEYDVVSREKQMLHDEVKKLRALLRDQGLIKKQISAGTIKVSGEEDTVEISSVVVAHPRTENMNANQITGGNQVYGQYNNPMLVASSGWPSYP

>ATHB52

MENSQSQGKNKKKRLTQDQVRQLEKCFTMNKKLEPDLKLQLSNQLGLPQRQVAVWFQNKRARFKTQSLEVQHCTLQSKHEAALSDKAKLEHQVQFLQDELKRARNQLALFTNQDSPVDNSNLGSCDEDHDDQVVVFDELYACFVSNGHGSSSTSWV

>ATHB53

MDHGRLMDDQMMLGSQVYPYTTQPQNSHCIIVNQIDGGEESKPVKRRRKRRSKGSSATNEEDVAEIGGMLRKRKLTDEQVNMLEYSFGNEHKLESGRKEKIAGELGLDPRQVAVWFQNRRARWKNKKLEEEYAKLKNHHDNVVLGQCQLESQILKLTEQLSEAQSEIRKLSERLEEMPTNSSSSSLSVEANNAPTDFELAPETNYNIPFYMLDNNYLQSMEYWDGLYV

>ATHB54

MENSDTDSEVFFWFQNQNQNHSHKFPSSCFPPSSHSAFYGSSSMINTETATMDEEDVCESYMMREITKKRKLTPIQLRLLEESFEEEKRLEPDRKLWLAEKLGLQPSQVAVWFQNRRARYKTKQLEHDCDSLKASYAKLKTDWDILFVQNQTLKSKVQFLNRLTSHYFQESVQNFDDTFKQVDLLKEKLKMQENLETQSIERKRLGEEGSSVKSDNTQYSEEEGLENQYSFPELAVLGFYYDPTLTASNLRQEPLKVTCADQMTQIQISDVTEPASSAHKKIEVTQRSSSMSRKRDKPYTNRHTPARISKRRRPWAPSSSEHDEIIDKPITKPPPPPALVVMGLPANCSVLELKSRFEIYGSISRIRIHKDGIGSVSYRTAESAEAAIAGSHEPSFGISIDSKKLEVVWATDPLVKWKEGVTAGEGKERTSSFSSKLLRPVMPLRKHGRSSRLASAIVNPRSDNTKGISGDGGISSPATTSEVKQRNIVTYDDIV

***Nicotiana tabacum***

>NtHDZI1

MKRPCSSDSLGALMSMCPNTTDEQNHMYSTRDFQSMLLDEEGCIEESGHVSEKKRRLSVEQVKALEKNFEVENKLEPERKVKLAQELGLQPRQVAVWFQNRRARWKTKQLERDYGVLKANFDALKHNYESLKHDNEALLKEIRELKSKVYTENGENRGVAVKEEAMESESDDNKVIELSKPNDNDINNNNLLENFEEEEDEEEEINFENFNAAAASTNIFGDHFKDGSSDSDSSAILNEDSSPNAAAISSSGAFLISTNGNGSGSSKSSTSLNFCFQFTESSSKSNLGDGQKGNNYYQPQQYVKMEEHNFFNGEESCSTLFTDEQAPTLQWYCPEDWNWKES

>NtHDZI2

MKRPCSSDSLGALMSMCPNTTDEQNHVYSTRDFQSMLLDEEGCIEESGHISEKKRRLSVEQVKALEKNFEVENKLEPERKVKLAQELGLQPRQVAVWFQNRRARWKTKQLERDYGVLKSNFDALKHNYESLKHDNEALLKEILELKSKVYTENGESKGVAVKEEAMESESDDNKVIEQSKPNDNDNNNNNFLENFEEDDEEEEINFENFNVAAAATSTNIFGDNFKDGSSDSDSSAILNEDNSPNAAAISSSGAFLISTNGNGNGNGSSTSLNFCFQFTESSSKSNLGDGQKGNNNYYQPQQYVKMEEHNFFNGEESCSTLFTDEQAPTLQWYCPEDWNWKE

>NtHDZI3

MGSEVEELIKKEKYGVVPNGDNEDLYNFPKFTKICVILVGFGDDHNQWNSQVYSRNFQSMLELGLEDEPCAEESGHGSEKKRRLRVDQVKALEKNFEVDNKLEPERKVKLAQELGLQPRQVAIWFQNRRARWKTKQLERDYNVIKANFDSLKHNYESLQHDNEALLKEICDLKSKLNGGNNESKADVKEEAIESETDDKDIDQSKPNNSTTSLGNCEDDSTELNIESFNGGNGIITSSNIFADFKDGSSDSDSSAILNEENSPNYAAISSSGAFLISNNGGSNSSSSNSSLNCFQFFDSNPKAILGDGQDKVVYNNQPQFVKMEEHNFFSSEESCSTLFADEQPPTLQWYCSEDWNNWKDS

>NtHDZI4

MLELGLDEEACVEESGHGSEKKRRLRVDQVKALEKNFEVENKLDPERKVKLAQELGLQPRQVAIWFQNRRARWKTKQLERDYNVLKANFDSLKHNYESLQHDNEALLKEICELKSKQNGGNNESKADVKEEAIESETDDKYIDQSKPNNSTTLGNCEDDSTELNFESFNGGNGTINDSNIFADFKDGSSDSDSSAILNEENSPNYAAISSSGAFLISNNGGSNSSSSNSSLNCFQFFDSNPKAILGDAKDKVFCNNQPQFVKMEEHNFFSSEESCSTLFADEQAPTLHWYCPEDWNNWKDS

>NtHDZI5

MKRFSFSDSSGKLLYPSEEKNTKNLAYSTDFQAMLDGLEDEDGIEENGCVTGKKRRLKVDQVQALEKIFEVDNKLDPERKVKIAQELGLQPRQVAIWFQNRRARWKTKQLERDYNILKANYEALQLNYTKVEQEKEGLINELKGLKEKIGEENSTAFQSPQEILELNPRNYEVNNKLYSDFVDSKDGSSDSDSSGVMNEENYNNTLNYQPLMPKVSSYNALDHLSLSSSTYTQLLDPRASSTSSMRGYNQQQQIGRMEEQNGFTTEDSCNIYSVDQAPNLYWYLSDHRN

>NtHDZI6

MKRFSFSDSSGKLLYPPEEKNTENLAYSTDFQAMLDGLEDEDGIEESGCVTGKKRRLRVDQVQALEKIFEVDNKLDPERKVKIAQELGLQPRQVAIWFQNRRARWKTKQLERDYNILKANYEALQLNYTKVEQEKEGLINQLKGLKEKIGEENSTAFQRPQEILELNPRNYEVSNKLNSDFVDSKDGSSDSDSSGVMNEENYNNTLNYQPLMPKVSSYNALDHLSLSSSTYTQLLDPRASSTSSMRGYNQQQQQVGKMEEQNGFTTEDSCNIYSVDQAPNLYWYLSDHRN

>NtHDZI7

MLFLGNSDPVFRGPRSMMKMEDSSKRRPFFSSPEELYDEEYYDEQSPEKKRRLTPEQVHLLEKSFEAENKLEPERKTQLAKKLGLQPRQVAVWFQNRRARWKTKTLERDYDQLKSSYDSLLSDFDSIRKDNEKLKAEVVSLMEKLQGKVVGEAGVINEKCEVLEVDALTLQVKVKAEDRLSSGSGGSAVVDEHSPQLVDSGDSYFHTGHMEEYPLGAGGCNNIPPPMDGLQSEEDDGSDDGGGHGYFCNVFVAAEEQQHEEGEPIGWFWS

>NtHDZI8

MEVGRVKEGSNMSTANSVLPSEVLHNLWMSNSSPSFHGPTSMVNFEDGRGEISKEMSFFSPIDKEETSTDDYDSCFHRPEKKRRLLPNQVQFLEKSFEVDNKLEPERKVQLAQELGLQPRQIAIWFQNRRARYKTKLLEKDYDVLKASFDKLKDDYDSLFKENENLRNEVDLLKEKMLRREKGKENSGQNEPISPVDAEEAQKATPNVVTSEVPSIQKVVCKQEDASSAKSDVIDSDSPHYTDGNHSSNAFEAEPSDFSQDEDDNLSKSFLCFPEIGDQIQANSCNLGFQIEDHQPCWFWQY

>NtHDZI9

MLFLGNSDPVFRGPRSMMKMEDSSKRRPFFSSPEELYDEEYYDEQSPEKKRRLTPEQVHLLEKSFETENKLEPERKTQLAKKLGLQPRQVAVWFQNRRARWKTKTLERDYDQLKSSYDSLLSDFDSMRKDNEKLKAEVVSLMEKLQGKVVGEAGVVGEKCEVLEVDAMTLQVKVKAEDRLSSGSGGSAVVDEHSPQLVDSGDSYFHTGHIEEYPIGAGGCNNIPPPMDGLPSEEDDGSDDGGGHGYFSNVFVAAEEQQHEDGEPIGWFWS

>NtHDZI10

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>NtHDZI11

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>NtHDZI12

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>NtHDZI13

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>NtHDZI14

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>NtHDZI15

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>NtHDZI16

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>NtHDZI17

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>NtHDZI18

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>NtHDZI19

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>NtHDZI20

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>NtHDZI21

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>NtHDZI22

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>NtHDZI23

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>NtHDZI24

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>NtHDZI25

MDWNGNLRSFVSRPAPPDNSFNFLYSYNYDQYPGMEMKHAMQTPHSGVLPTMDKLNDNFAMNQLDKKKRLTSDQLESLENSFQEEIKLDPERKIKLAKELGLQPRQIAVWFQNRRARWKSKQLERLYDSLKQDYDLVSREKQKLQNEVLALRAILKEQATKKQVNSTVYTEISGEETVESTSMPSSNKTRGISTSNHQNNNMAECSYVFNVNNVEGFNPVMPPYWV

>NtHDZI26

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>NtHDZI27

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>NtHDZI28

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>NtHDZI29

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>NtHDZI30

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>NtHDZI31

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>NtHDZI32

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>NtHDZI33

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>NtHDZI34

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>NtHDZI35

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>NtHDZI36

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>NtHDZI37

MSVGERPPTNSNMWSQSSLLGKDLNLHSMSSIKNCKDNMRRRFNDEQIRSLEHMFETEARPELRTKQQLAKSLGLQPRQVAIWFQNKRARSKSKQLEMEYRMLKISYDNLGSKYEMLKKENEALLIQLQRLRKITEKVGNGEIQNEGNKLETEVIKSEFIPETCSPEFGLPLCEDSREIDYLGTESDILNMAQIAYGLSEIENECNIESRIFFDDSDCRSPLWEF

>NtHDZI38

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>NtHDZI39

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***Oryza sativus***

>Oshox4

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>Oshox5

MDPGRVVFDSGVARRACPGGAQMLLFGGGGSANSGGFFRGVPAAVLGMDESRSSSSAAGAGAKRPFFTTHEELLEEEYYDEQAPEKKRRLTAEQVQMLERSFEEENKLEPERKTELARRLGMAPRQVAVWFQNRRARWKTKQLEHDFDRLKAAYDALAADHHALLSDNDRLRAQVISLTEKLQDKETSPSSATITTAAQEVDQPDEHTEAASTTGFATVDGALAAPPPGHQQPPHKDDLVSSGGTNDDGDGGAAVVVFDVTEGANDRLSCESAYFADAAEAYERDCAGHYALSSEEEDGGAVSDEGCSFDLPDAAAAAAAMFGAAGVVHHDAADDEEAQLGSWTAWFWS

>Oshox6

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>Oshox8

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>Oshox12

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>Oshox13

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>Oshox14

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>Oshox16

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>Oshox20

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>Oshox21

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>Oshox22

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>Oshox23

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>Oshox24

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>Oshox25

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***Zea mays***

>Zmhdz1

MESGRLIFNAPGSGAGQMLFLDCGAGGGPGGGLLHRGGRPMLGLEEGRGVKRPFYTSPDELLEEEYYDEQLPEKKRRLTPEQVHLLERSFEEENKLEPERKTELARKLGLQPRQVAVWFQNRRARWKTKQLERDFDRLKASFDALRADHDALLQDNHRLRSQVVSLTEKLREKEATEGDANGAAAALPAVGVVRASVADDVEEPEPEPEPEAEAAAFEERQVKSEDRLSTGSGGSAVVDAADALLYNGRIGGAAVDSSVESYFPGAEVQDQYHGCGTMGPVTHGAGGIQSDDDDGAGSDEGCSYYADEEAAAAFLSEHTHHADGDDEDAGQVSWWWMWN

>Zmhdz2

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>Zmhdz3

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>Zmhdz4

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>Zmhdz5

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>Zmhdz6

MERGDCQFTVVPPRQYDEAQFMHQLMVAGDQQDPAGAGRGAAAAGGERKRRFTEEQVRSLETTFHARRAKLEPREKAELARELGLQPRQVAIWFQNKRARWRSKQLEHDYAALRAQFDAMHARVESLRQEKIALAAQVDELRGRLNERQDQSGSCEVNDAEAAADDKRNNSTSSLVQDDGATPPPAAVDASEDSAATGEYYDHVAYEYDGLHDPFVCATPDLWDTWPLLEWNAVA

>Zmhdz7

MDPASSLISSSAVPFPAAGDGGGQRQVFLFGGGFVGGAPPLVGGAADGRRKRPFQLTAHDELQLQLQLQLDDELCGLDYELHGPQQERTTKRRLTAEQVRELELSFEEEKRKLEPKRKLEPERKSELARRLGIAPRQVAVWFQNRRARWRSKQLEQDFDRLRAAHDDLIAGRDALLADNDRLRSQVITLTEKLQTKESAAAAAEPGEQTVAAQATAYAVLEGDKLCSGSAAAPAAAGTNDSPESYFAGARSPPSSPEDDDRAFFFPPDALLNNWAWVWNDRQY

>Zmhdz8

MKRPRGASPPLAAMTNPNDDGYGVVGMEADADADADEEMMACGGGGEKKRRLSSEQVRALERSFEVENKLEPERKARLARDLGLQPRQVAVWFQNRRARWKTKQLERDYSALRQSYDALRHDHDALRRDKDALLAEIKELKAKLGDEEAAASFTSVKAEPAASDGPPPVGVGSSESDSSAVLNDADPPVAEAPVPEVRGTLLDAPGAVAANHGGVFFHGSFLKVEEDETGLLDDDEPCGGFFSVEQPPPMAWWTEPTEHWN

>Zmhdz9

MEGDDDGPEWMMEVGGAGATGKGKGGALDKNKKRFSEEQIKSLESMFATQTKLEPRQKLQLARELGLQPRQVAIWFQNKRARWKSKQLERDYSALRDDYDALLCSYESLKKEKHTLLKQLEKLAEMLHEPRGKYSGNADAAGAGDDVRSGVGGMKDEFADAGAAPYSSEGGGGGKFAHFTDDDVGALFRPSSPQPSAAGFTSSGPPEHQPFQFHSGCWPSSTEQTCSSSQWWEFESLSE

>Zmhdz10

MSWRECVRNEDLSPCACVFPDDGYGVLGMEADVDVDVDEEMMAFGGGGGGEKKRRLSAEQVRALERSFEVENKLEPERKARLARDLGLQPRQVAVWFQNRRARWKTKQLERDYAALRRSYDALRLDHDALRRDKDALLAEIRELKAKLGDDEDAAASFTSVKAEPAASDGPAPAGVGSSEISDSSAVLNDADPPVAEAPAPAPEVQGTLLVAPAGPVAGAAAANHGGVFFHGSFLKVEEDETGLLDDDGPCGGFFAVEQPPAMAWWNEPAEHWN

>Zmhdz11

MRPMASNGMASAPSPFFPPNFLLQMQQTPSDHEHQEQHHHHHHHKHHLAAPPLHPHHNPFLPSSQCPSLQDFRGMAPIMLGKRPMYGADVQVVGGEEVNGCGGVNEDELSDDGSQAGGEKKRRLNVEQVRTLEKNFELGNKLEPERKLQLARALGLQPRQVAIWFQNRRARWKTKQLEKDYDALKRQLDAVKADNDALLSHNKKLQAEILSLKGREAGGSSELINLNKETEASCSNRSENSSEINLDISRAPASEAPLDPTPPPGAGGGGMIPFYPPSVGGRPASAAGVDIDQLLHTSAPKLEQHGSGGAVVVQAAETASFGNLLCGVDEPPPFWPWADHQHFH

>Zmhdz12

MDGAEDDGTEWMMHGAGGKGKGGGALDKNKKRFSDEQTKSLESMFATQAKLEPRQKLQLARELGLQPRQVAIWFQNKRARWKSKQLEREYSALRDDYHALLCSYESLKDEKRALLKQLEKLAEMLHEPPQGKYYGGNADDVRSGGVGGTKEEEESTDACAGAALYSSECAGGGRFIAHFLADDDVGAALFRPPSSPQPTAGLLTSSGPPEHQPFQFHSGCCWPSSSAEQTCSGSQWWELESLSE

>Zmhdz13

MKPMATNGMAPSFYPANFLLQMQQALPHHYQQQEQHHEGHDDEDHEAAHHLLAPPPAALVSPFLHDFGGAMAAAPPPPMLAGGFGGKRMYPDVGGMAGDDSHHLHAEPQQQQEQQASDDEEEGSAAVGGGERKRRLSVDQVRTLERSFEVANKLEPERKAQLARALGLQPRQVAIWFQNRRARWKTKQLEKDYDALRRQLDAARAENDALLSHNKKLQAEIMALKGGGGGGGRQEAASELINLNVRETEASCSENNSSEINGLDVSRPDPAAGESPAMNSYRGGLPFYASAAARADIHHQLLHSGGQPSPAAAAPPKMELAPGSPPATAGGGGGTFGSLLCGAAVDEPPPFWSWADGHHTCFQ

>Zmhdz14

MKRQSKRPTASRESPETGEKQKLAFAEEEAPPARKVEPDDEAEMDEDEDELGPGLGGGRAARSPCGLGEKKRRLALEQVRALERCFETDNKLDPDRKARIARDLALQPRQVAVWFQNRRARWKTKTLERDFAALRARHDALRADCDALRRDKDALAAEIRELRQKLLPKPEATVKLEATTGNDTAEERRQATAGAPPAGACKDGSSDSDSSVVFSDVEASPYSGGAAFEPPALAGLGAPFLDTSVAPTGCSSPPVFVETKWQQHGPTQYPFPFDSYKACAGYGFTEEWLASSDLIGSDGGAAGFFSEDHASSLNFNWCPSGIQGWE

>Zmhdz15

MGCEEEERLLFPSFVFPESFAEAATPGSGGEQKKARQRRRRKPRPAEGGEGADEQARKRRLSDDQARFLELSFRKERKLETPRKVQLAAELGLDAKQVAVWFQNRRARHKSKLMEEEFSKLRAAHDAVVLHNCHLETELLKMKDRLAEVEEEKTKLVAAAAAAAGGAAGAGSSSPSSSSFSTVTHHPAAALQVGQFGVEPEEAADLAYMTEYAYNSYMNMMDLAPAYFGGVVYDYDHFN

>Zmhdz16

MKRPTSRGSSMVSGQATTDLQEDSCRSMEPHGVDGDATAAAERDDVDAGAYDEEVDEEEELAGSRGGLGEKKRRLAADQVRALERSFEVDNKLDPERKARIARDLSLHPRQVAVWFQNRRARWKTKQIERDFAALRVRHDALRVECDALRRDKDALAAEIKELRGMVEKQMEVKLESAAEELLPVATRSAAAAAVYNKDGSTDSDSSAVFNEEASPYPYSGAALDHQQQQETSHPLGFTGFTSFLTSSFPSVYHGDSHLDQEADGFFSAAAAGDGFFAEEQSAGIGSWYGGEGW

>Zmhdz17

MAAWVSCLHLWPLSLSLSLSLSTPSLTPVLQSCSARKEIGITANSFVRATRLLLFQDPCRSLTIESPPFPNPFQSSAAKCRSQMKRQSKRPTASRDSPETGTVDKQLALAESLTARKTEPDELGEKKRRLAPDQVRALERCFEADNRLDPDRKARVARDLALNPRQVAVWFQNRRARWKAKALHRDFAALRARHDALRRDKDALAAEIRELRQKLAEPAAVKTEATGSDTAEARPTTTTTAGAPAPPAGGCKDGSSDSDSSVVLNDDVDASPYSGAAFEQPGAFAGFGAPFLAASAAAAPPPTGCSSPPVFETKWQHGPTTYAFESYKSCCAGYGFTEEWLASSDVVGSDGAAGFFSEDHASSLNFSWCASGAQDWE

***Sesamum indicum***

>SiHDZ07

MSGGIKKSSRNINRRRFSDDQIKSLETMFETESRPELRLKQHLANKLGLQPRQVAIWFQNKRARSKSKQIEQEYSMLKSNYDKLASQFEALRKENQNLLTQVDRLRRLADNGDGDEHDNKNHFTLSSSENPRLLLDINCQELCIPTCSDLNRKVGYLEEEADALNMAQIAGGSLASPENRGSFDSSTFLDNTGSGSQWWNF

>SiHDZ09

MSTEMAFFHPNFMLQTPHQDEHTHPSTSLPPLLPSCSTPQEFHGVAPLLGKRSSMGFSTGIDVCEEMNNHGEDELSDDGSQVGEKKRRLNMEQVKTLEKNFELGNKLEPERKMQLARALGLQPRQIAIWFQNRRARWKTKQLEKDYDLLKRQFEAVKAENDALQAQNQKLHAEIMALKNKEPTESINLNKETEGSCSNRSENSSEIKLDISRTPAIDSPLPAHPTNAGRPLFPSSLIRPSGVAQQLFHNPSRPEIQCPKMDQSVKEESLCNMFCGMDDQTGFWPWLEQQHFN

>SiHDZ10

MEGCKSYDDSHMENVLLKNERIPCTSEVLDCLWVPNSSPPFHVSGSAAVVNFEEIRGENSTERPFFTQVDSKVENLSEEFDGCFHQPEKKRRLTVEQVQFLEKSFEVENKLEPDRKVQLAKELGLQPRQVAIWFQNRRARYKTKLLEKEYGSLKASFDKLKADFDTLSAENEKLKNEVQLLTQKMLLRDNGKPKLESFDPISPLDLQPENPAFSPQAAACKQEDGASSAKSDILDSDSPRHTDGNFPAILDPVGSSHDFEPDPSDFSQEENESLSRSLLQPTCFPKLEVECYDDLQPNSCNLGFPVQDQGTWFWQY

>SiHDZ15

MTCEMAFFHSNFMLQTPPHQEDHDQNHPSTSLPPISLPSCTPQEFHGGVASLLAGKRSSMSFSTGIDVCEDHMNNHNHGEDELSDDGSQVGEKKRRLNMEQVKTLEKNFELGNKLEPERKMQLARALGLQPRQIAIWFQNRRARWKTKQLEKDYDLLKRQFEAVKAENDALQAHNHKLHAEILALKSREPTESINLNKETEGSCSNRSENSSEIKLDISTTTPAATCTESPLSTHPIPRALFPSTSSLSRPGGVVAHQLFHNSSSRPEIHHCPKMDQTVKEESLCNMFVGMDDQTGFWPWLEQQNFN

>SiHDZ16

MESPHEENPHRSTRKTSKNARRFTNEQIRSLETIFEMETKLEPRKKHEVARDLGLQPRQVAIWFQNRRARWKSKQLEQEYKVLKTNYDGLCMQFDHLKREKQSLQMQISKSRAFPQLQELTDLVKNLDNVGISDGDAELKEDPNSSNEGMDHNDAMYTDDEETVTKYFKETEEQEPLSWGTEQVEISHLESPETWCNDLSSGSLFDQSSCKSNWWESLKI

>SiHDZ24

MDSGRIFFDSSSNGNLLFLGNGDSIFRGGSRVMNMGESSKRRPFFGTAEDLYDEEYYDEQLPEKKRRLTPDQVNLLEKSFEEENKLEPERKTELAKKLGLQPRQVAIWFQNRRARWKTKQLERDYDHLKSSYDSLVSNYDSIIKENNKLKAELLFLTEKLQPKESTQEEGFDIQNPNPTPAPYLQLIMKVEDRLSTGRQRRGQLLDSGDSYLEYQQGCMASVEGVKSEEDEGSEEGGSYFSDVFAAPEPQEPVGWFMWP

>SiHDZ27

MEVYDDSRISNALLKNERLPCTSEVLDSLWVQNSSPSFHASASMVNFANVQGETKTERPFLPQIDTKAENCNEGALDGCSFHHPEKKRRLTPNQVQFLEKSFDEENKLEPERKLQLAKELGLQPRQVAIWFQNRRARYKTKLLEKEFDSLKSSYDRLKADYDTLYKENEKLKTEVNSLAEKSRLRDNGKPKTEQCDDPISPLDLQPNKPICSQNAAQTVASKQEDAASSAKSDVFDSDSPHYTDGNHSAALEPADSSHVFEPDASDFSQDEDDSFNRSCLMPSLSFQNWKLNALMIYSRTRAIWDSLFRIKGHGSGSIELRGSGLDVGGIFGSCMLMLLC

>SiHDZ31

MMSDWMENSCVGNLNTMAKKKKIKNKRRFSDEQIRSLEVMFESESKLEPKKKAQLANELGLQPRQVAIWFQNKRARWKSKHMEKEYAILLANYNNLASQVEALKEQNQSLLIKLQKLKNEMMGKSEGQIQEIARKGITDDDGESDHTKIQLSEVTNVGTRSLEEILSDDDSSIRPVLFGLDEENELLKLVEPAAADSSLTSAEDWGSLDSDDLINQPTDHDCYQWWDFWS

>SiHDZ35

MDWNANLRVPNFVSRPDNSLSFLYNYNYNDQFPAGLEIKQPTMQSSTQHTMLPTFMEKSNSSMNIYGQDPKKKRLSTEQLESLENSFQEEIKLDPDRKMKLARELGLQPRQIAVWFQNRRARWKGKQLERLYDALKQEFDAVSREKHKLQQEVLALRAILKDQVAKKQVSTGYTEVISGEETVESTSIPSSDNTPAPPENVPHHQIPECNYVFNVEDYNQVMMTPTPYNWPPLPSCP

>SiHDZ37

MDEFRCPQTRKQQSKHRKRLSQDQVRLLETNFNFNNKLDPDRKSRLALELGIPPRQVAIWYQNKRAREKNQSLEADHKTLQQQLENVVAENARLEGEVERLKAELNKIHDVLNAFNSSTCCEEVGSSSLSSEQNLEKELYAALIGVRDPFVAPDGYDFFG

>SiHDZ39

MMINPEFDDQMVLISGQYYPVGIISQFVQEQGAAVEESKPRRRRRKKNGGGGDGDGEAVMMRKRKLSEEQANMLEKSFGSEHKLESERKERLAAELGLDPRQVAVWFQNRRARWRSKKLEEEFSKLRSHHDSTLIEKSRLETELVKVKEQLQEAEKEIQRLSERWDHGFSSNSPSSSTNMEQPPLLGFEGLENVFCVPHDNSYGHGFEWDNFYYL

>SiHDZ40

MKRLSSSDSLGALMSICPNSTDEHNNPMYTREFQTMMEGLDEEGCVEESGHVSDKKRRLSVDQVKALEKNFEVENKLEPERKVKLAQELGLQPRQVAVWFQNRRARWKTKQLERDYGVLKANYDGLKLNFEKLQHDNEALLKEIGELKSKLNQDGNSESKVSDAEVKSKHETQLKENGTEISFETLNGDSNGGIPTRGVSVFGDFKDGSSDSDSSAILNEDNNNSPHQFLDIQNGSNSISFQFCSESKPGETTTAIAGLGEAHKNYHTQFVKIEEHNFFGEESCTSFFTDDQAPTLPWYCSDDWN

>SiHDZ41

MAFVPAESMFRNHEDSHFPSSSPCAPQDFHGVPEFLMRRSMSFSGMERPEDQLQPEDEMSDDGSQLLGEKKRRLNLEQVKALEKSFELGNKLEPERKMQLARALGLQPRQIAIWFQNRRARWKTKQLEKDYDMLKRQFEALKADNDALKSQNKKLQTQLLALKTRDSTGSGAINLNKENEGSWSNVSENSCEVNLNTTSTDSTLYPHPHHHQTNKNPVINFPSAIGPSSLTQLLQRPDHHLQLCQKMDHAPVSNDGFGNMFGAGIEENQDFWPWPEQQNFN

>SiHDZ43

MKPMNPEEVDDQMVLISQYYPDGIYSQFVPEQGAAMNSKPRRRRKKNKGDRGGAGDGVMRKRKLSEEQVNMLERSFGSEHKLESERADRLAAELGLDPRQVAVWFQNRRARWKSKKLEEEYSKLKSEHETAVVEKCRLETELLKLKEQLQEAEKEIHRLSERWDGVSSNSPSSSFSIEAMDPPFLGEFGMEGLGNVFYVPEAEENYAQGLEWNTFYYM

>SiHDZ44

MKRSLGSSDSLGALMSICPNSTDENSPKGDYPMYTREFQTMLEGLDEDCGGGCVEETGQVSEKKRRLRVDQVKALEKNFEVENKLEPERKVKLAQELGLQPRQVAVWFQNRRARWKTKQLERDYGVLKANYDALKHKYEQLQRDNDSLLNEILELKSKLNEGDGEHDSKVSVKEEPLVSETEAKTEIEAPFIELNFENCRNELTTMMREASVFVDFKDGSSDSSDSSAILNEDNNNSPVGAAISSSAGGVLHHSPPAHDDEFLDNVHGIGLSSSAISLHQLSDSKVYQPPQFVKIEEHNFFGEECCSSLFSDDQPPTLHWDDCSDVWN

>SiHDZ45

MDWNGNLRVPFVSRPAAVENSYNFHYNFNYDQFPVLEMKQPPMLTTPQQAMLPTLADKNNSMMHNFGQDPKKKRLSNEQLESLENSFQEEIKLDPDRKMKLAKELGLQPRQIAVWFQNRRARWKAKQLERLYDALKREYDAVSRDKQKLQQEVMALRAILKEHLAKKQVLSTGYTDISGEETVESTSIPTSNDPSPPTTTNSLHQINADHQCNNNYGLNVDDYNNPVMMPPYWAAAAAPSCP