Potential PEST sequence occurrence in DHN subclasses

SK-Type

Specie	Access number/Name	PEST score	Position	Protein size	Sequence
Amborella trichopoda	AtrDHN-SK	6.65 0.87 12.19	182-177 5-17 201-212	212	MADEHTTSVVPESGDGRVEVHERGLFGHHHPETPEQKQEEALASKFEEVYVSEEKKEEKEKDEEKKGSLLEKLHRSGSSSSSSSSDEEEAEEWKKKKKERKGLKEKIKEKLSGGSEAVKEKAGEGAPHCAGAEHAHEKEKKGLPEKIKEKLHGGGGYGAPQHPVEAPESAPQTSAPHPEGQSHEEKKGFLEKIKEKFSGYHPNSGEETTPSH
Amborella trichopoda	AtrDHN-SK2	ND		148	MAEYRGDERYQKHEHGYEQGQPGYYGQDYTDTGVTGTGAGTGAGTGGVMLGTTGAGMMHGTQPEQQKLHRSNSSSSSSSSEDDGMGGRRKKKGLKEKIKEKLPGGHKTTEGQHGEAGAGVHGHEHEHEKKGIIEKIKEKLPGHHKDQLNA
Aquilegia coerulea	AcDHN2-SK2	4.15	125-136	233	MAEQQPQTTVEGAEIKDRGMFDFLSKKKEEEKPQEAEVLATELENVHVSEPVHDHHVAEPVEVKKEEVDEEKKPSLLEKLHRSDSSSSSSSSEEEVEEDGQKIKRKKNKGLKEKIKEKISPEEKKVEEDTTVPIEKFDDEVGVVSHEGEVKHPEEKKTFMEKIKEKLPGGNKKTADHESASTPDAIVLPPPAAPVHEEEPKEKKGILEKIKEKLPGYHKTEDEKKETTTTTEH
Arabidopsis halleri	Araha.12526s0002.1_SK2	ND		106	MQSSDEEAGENGEKKEKEKKNKKKKEVVADQCETEEKNKEKLPAGIGHEDGKEKGFMEKMKDKLPGGHHGKPEAEPHNDKGKEKGFMEKIKEKLPGHTNDEKKKET
Arabidopsis halleri	Araha.23419s0001.1 (ERD10)	0.95 11.33 4.96 2.52	202-224 6-21 36-49 160-173	258	MAEEYKNNVPEESSTTTPEVKERGMFDFLKKKEEVKPQETTTLASEFEHKTQISEPEPFVAKHEEEEQIKEQKPTLLEKLHQKHEEEEENKPSLLDKLHGSNSSSSSSSDEEGEDGEKRKKKKEKKKIVEGDVKTEEEENQGVMDKIKEKFPYGEKPEGHDDVPEITTMPAPHSVEDKPEEEEKKGLMDKIKEKLPGHSKKPEDSQVVNSAPLVETATPIAEHPEEKKGFMDKIKEKLPGYHAKTSGEEEKKDKESL
Arabidopsis halleri	Araha.3199s0027.1 (ERD14)	12.07 4.52	43-56 58-69	190	MAEEIKNVHEQEVPKVATEESSSAEVTDRGLFDFLGKKKGETKPEETTIDSEFEQKVHISEPEPAPEVKHESLLEKLHRSDSSSSSSSEEEGEDGEKRKKKKKEKKKPVAEVEVKTEEEKKGFMEKLKEKLPGNSKKPEDGSAVAAAPVVVPPPVEEAHPAEKKGILEKIKEKLPGYHPKTTVEEEKKDKE
Arabidopsis halleri	Araha.9031s0001.1 (COR47)	4.53 4.40 4.40 11.04	153-175 199-217 16-32 46-59	260	MAEEYKNNVPEHETPKVATEESPATTTEVTDRGLFDFLGKKEEEVKPQETTTLEPEFDHKAQNSEPELAAEHEEVKENKITLLEELQEKTEEDEENKPSVIEKLHRSNSGSSSSSDEEGEEKKEKKKKIVEGEEKKGLAEKIKEKLPGHHDKKPEDDVPVSTTIQVPVSESVVEHDQPEEEKKGPVQKIKEKLPGHHDKTAEDSPAVTSTPLVVTEHPVEPTTEHPEEKKGILGKIKEKLPGYHAKTTEEEEKKVKETDA
Arabidopsis lyrata	AL1G33370.t1 (COR47)	6.70 7.91 12.64 10.60	153-175 199-217 16-32 46-59	264	MAEEYKNNVPEHETPKVATEESPATTTEVTDRGLFDFLGKKEEEVKPQETTTLESEFDHKAQISEPELAAEHEEVKENKITLLEELQEKTEEDEENKPSVIEKLHRSNSSASSSSDEEGEEKKEKKKKIVEGEEEKKQGLAEKIKEKLPGHHDKKPEDDVPVSTTIPVPVSESVVEHDQTEEEKKGLVEKIKEKLPGHHDKTPEDSPAVTSTPLVVTEHPVEPTTEHPVEHPEEKKGILEKIKEKLPGYHAKTSEEEEKKVKETDD
Arabidopsis lyrata	AL1G33380.t1 (ERD10)	1.45 11.33 4.96 0.50	200-222 6-21 36-49 50-62	256	MAEEYKNNVPEESSTTTPEVKERGLFDFLKKKEEVKPQETTTLASEFEHKTQISEPEPSVAKHEDEELKEHKPTLLEKLHQKHEEEEENKHGLLDKLHRSNSSSSSSSDEEGEDGEKRKKKKEKKKIVEGDVKTEEEENQGVMDKIKEKFPYGEKPEGHDVPVVTTMPPAPHLVDDKKPEEEEKKGLMDKIKEKLPGHSKKPEESQVVNTAPLVETATPIAEHPEEKKGFMDKIKEKLPGYHAKTSGEEEKKDKESL
Arabidopsis lyrata	AL2G36240.t1_(ERD14)	12.07 4.52	43-56	106	MAEEIKNVPEQEVPKVATEESSSAEVTDRGLFDFLGKKKDETKPEETTIDSEFEQKVHISEPEPAPEVKHESLLEKLHRSDSSSSSSSEEEGEDGEKRKKKKEKKKSVAEVEVKTEEEKKGFMEKLKEKAAAPVEEAHPAEKKGILEKIKEKLPGYHPKTTVKEEKKDKE
Arabidopsis lyrata	AL7G10280.t1_SK2	ND		164	MADHPRSSEQQEADVAASKGCGMFDFLKKKPEDVHSSENAGVTKEPKEEEKPSLAERLHLSDSSSSSDEEAGENGEKKEKENKKKNKKEVVAAQCETEEKLPAGRGHEDGKEKGFMEKMKDKLPGGHHGKPEAEAHNDKGKEKGFMEKIKEKLPGHTNDETKKET
Arabidopsis thaliana	AT1G20440-SK3(COR47)	5.35 18.89 2.40 10.60 6.02	153-176 12-32 201-218 46-59 218-230	265	MAEEYKNNVPEHETPTVATEESPATTTEVTDRGLFDFLGKKEEEVKPQETTTLESEFDHKAQISEPELAAEHEEVKENKITLLEELQEKTEEDEENKPSVIEKLHRSNSSSSSSSDEEGEEKKEKKKKIVEGEEDKKGLVEKIKEKLPGHHDKTAEDDVPVSTTIPVPVSESVVEHDQTEEEKKGLVEKIKEKLPGHHDEKAEDSPAVTSTPLVVTEHPVEPTTELPVEHPEEKKGILEKIKEKLPGYHAKTTEEEVKKEKESDD
Arabidopsis thaliana	AT1G20450-SK3(ERD10)	7.32 4.96 1.34	204-230 43-56 16-28	260	MAEEYKNTVPEQETPKVATEESSAPEIKERGMFDFLKKKEEVKPQETTTLASEFEHKTQISEPESFVAKHEEEEHKPTLLEQLHQKHEEEEENKPSLLDKLHRSNSSSSSSSDEEGEDGEKKKKEKKKKIVEGDHVKTVEEENQGVMDRIKEKFPLGEKPGGDDVPVVTTMPAPHSVEDHPEEEEKKGFMDKIKEKLPGHSKKPEDSQVVNTTPLVETATPIADIPEEKKGFMDKIKEKLPGYHAKTTGEEEKKEKVSD
Arabidopsis thaliana	AT1G76180-SK2(ERD14)	6.83	42-55	185	MAEEIKNVPEQEVPKVATEESSSAEVTDRGLFDFLGKKKDETKPEETTIPIASEFEQKVHISEPEPEVKHESLLEKLHRSDSSSSSSSEEEGSDGEKRKKKKEKKKKPTTEVEVKEEEKKGFMEKLKEKLPGHKKPEDGSAVAAAPVVVPPPVEEAHPVEKKGILEKIKEKLPGYHPKTTVEEEKKDKE
Arabidopsis thaliana	AT4G38410-SK2	ND		163	MADHPRSTEQQEADAAASKGCGMFDFLKKKPEDVHSSENARVTKEPKEEEKPSLAERFHLSDSSSSDEEAGENGEKKEKKKKKKKNEVAEDQCETEEKIPAGIGHEDGKEKGFMEKIKDKLPGGHNGKPEAEPHNDKAKEKGFMEKIKEKLPGHTNDEKKKET
Brachypodium distachyon	BdDHN1-SK3	12.51 17.87	204-219 158-169	252	MEDERNTQSHQAADQVEVTDRGLFDFKGKKKEEEDKKQEEVLVTGMEKVSVEEPEVKEEEVHQDGEKKESLFTKLQRSSSSSSSSDEEEEVIDDNGEVIKRKKKKGLKEKIKEKLPGHKDTEGEHKTAAPTPGPPVPSHHDDDGAVVVEKIDGEVKTEAPPAPEEEKKGFLEKIKEKLPGGHKKPEDTAAVPVTHGAPAPVHTPGPAATEEVSSPEKKGILGKIMDKLPGYHKTPGEEDKAAAGEHKTTA
Brachypodium distachyon	BdDHN2-SK3	6.71 10.00 3.94	122-140 158-169 205-221	254	MEDERSTQSHQGGEADQVEVTDRGLFDFKGKKKEEEDKKQEEVLVTGMEKVSVEEPEVKEEEHQDGEKKESLFTKLQRSSSSSSSSDEEEEVIDDNGEVIKRKKKKGLKEKIKEKLPGHKDTETAAPTPAPPAPVVTHGGHHDDGAVAVEKIDEVKTEAPVAPEEEKKGFLEKIKEKLPGGHKKPEEAAAVPAVTHAAPAPVHAPAVPAATEEVSSPEKKGILGKIMDKLPGYHKTPGEEDKAAAGEHKTTA
Cajunus cajan	CajDHN-SK	ND		126	MAEAQIRDQLGNPIPLTDQFGNPVKLTDENGNPVVLTGVATTLTGTVPDLLPTQARNNETDLARSSSTTSTSSSSSSSSSSEDDEEQHAEITTASHPTVTTISHPEPEKKGLLEKIKEKLPGHLNQ
Cajunus cajan	CajDHN-SK2	4.44 11.45	8-22 156-171	216	MAEEPQNKYETSQPSEVEVNDRGVFDFLGKKKEEDKPQEEVIVTEFENKVTVSGEADKKQEEGEKKPSLLEKLHRSDSSSSSSSEEEGEDGEKKKKKKKEKKGLKEKIKEEKIGGDHHKEEDTSVPVEKVEVVDAPHPEEKKGFLEKIKEKLPGQKKEEATPPPPVAASSDHGEGAHHHEGEAKEKKGILEKIKEKLPGYHPKTEEEKEKESGAH
Capsicum annum	CaDHN24-SK3	11.84 12.02	162-181 9-26	219	MADQYEHNKPSVEETTTGANVESTDRGLFDFLGKKEEEKPTHAHEEQAISSEFGEKVKVGEEEHKEEEKKEEKKLHRSSSSSSSSSSDEEEVEGDGQKIKKKKKKGLKDKMKDKISGDHKEEDKKTEDTSVPVEKYEETEEKKGFLDKIKDKLPGGGQKKTEEAAAPPSPPPPPAVAEHEAEGKEKKGFLDKIKEKLPGYHSKTEEEKEKEKEAASH
Citrus x paradisi	CpDHN-SK3	2.98 4.68	12-27 189-201	234	MAEEIKKQQKSHEYEPSVGTEGAVETKDRGMLDFLGKKEEEKPQHHDQEVIATEFEKVHVSEPQPKVEEHRKEEKEEEKKPGFLDKLHRSTSSSSSSSDEEEGDDEEKKKKKKEKKKGLKEKLKEKISGEKEEDTTVPVEKLDDVHAPHHQEEAHPEEKKGFLNKIKEKLPGQQKKPGDHQVPSPPAAEHPTSVEAPEAEAKEKKGILEKLKEKLPGYHPKSEDEKDKDKETAAH
Coffea canephora	CcaDHN-SK3	4.44 9.17	121-132 166-190	227	MAEYDQSNIKVEEGSAVEATDRGLFNLGKKEEVKKCDQGQAISAEFDEKVRVSEPDKEEGKKHGGLLEKLHRSGSSSSSSSSEEEVEEGGEKKKKKKEKKGLKDKIKEKISGDKKDEEKVEKCEEDTSIPVEKYAEPAHADAAHEPEEKKGFLDKIKEKLPGGGQKKTEEVAAAAPPPPPAECTATEGEAKDKKGFLDKIKEKLPGYHPKTEEEKEKEKEKEAGCH
Hordeum vulgare	DHN10-SK	ND		295	MEYQGQHGNAANRVDQHGNPVAALGATAVTGPPTGGQLQPGREEHKTRGILHRRSSSSSSSSSSEDDGMGGRRKKGIKEKIKEKLPGARKQTYGQPAAPAGMTGAGATGGPHYVQPAPAGTGVHGTTATTGTYVQPAPAGTGAHGTTATTGTYGQPAPAGMTGTGAHGTTATGEKKGMKDKIMEKLPGGHKNGQHTMPSAGAYGQPGMTAAGMDGNTTTGGGYGGQPGHAGTGTGHHATTGGAYDHQGNPGMTGTGAHGTTATGGAYNQQGHAGLAGTGEK KGIMDKIKEKLPGQH
Hordeum vulgare	DHN8-SK	2.63 12.28	204-219 157-189	255	MEDERSTQSYQGAEADQVEVTDRGLLGNLLGKKKEEEDKKKEEELVTGMEKVSVEEPEVKEDGEKKETLFSKLHRSSSSSSSSSDEEEEEVIDENGEVIKRKKKKGLKEKLKEKLPGHKDNEAHEVTGLPAPMAPASVQTHHDTDVVVEKIDGDAKTEATPAVPEEEKKGFLEKIKEKLPGGHKKPEDAAAVPVTHAAPAPVHAPAPAAEEVSSPDAKEKKGGLLGKIMDKLPGYHKTGEEDKAAAPSGEHKPRA
Lycopersicum	LyDHN-SK2	7.09	155-172	206	MADQYEQNKASVEETVGTNVEATDRGLFDFIGKKEEEKPSHAHEEEAISSELSEKVNVSEEVEPKEEEKKLHRSNSSSSSSSDEEEIGEDGQKIKKKKKGLKDKIKEKISGDHKEESKAEDTSVPVEKYEETEEKKGFLDKIKEKLPGGGHKKTEEVAAPPPPPPAAVEHEAEGKEKKGFLDKIKEKLPGYHSKAEEEKEKEKD
Malus domestica	MdDHN8-SK3	2.25 3.22 20.14	54-71 230-247 184-195	284	MAEEYNKSQEHEYERKTGDYEEGSGAGETKDRGLFDFLGKKAEEKPTSYQHEEKPASYQEEEVIVTEFDEKAKISDHHEALAPDQYTSSYSKVEEDKEKKHENLLQKLHRSNSSSSSSSDEEEDEEKKKKQRKEKKGLKDKIKEKISGDDHKEEGYHKEDTAVPVEKVYEEEHHHQAPAPVVHHHEEPTDYPTEEKKGFLEKIKEKLPGHEKTEEVPVGAASYEQQSHDHHATEPPVASYEAGEEPKEKKGIMEKIKEKLPGYHSKTEEDHKDIKEKEKDTPSY
Malus domestica	MdDHN9-SK3	0.91 28.65	223-240 177-188	277	MAEEYNKKSDEHEYERKTGDYEEGSGAGETKDRGLFDFLGKKEEEKPTPYQQGDQVNVAEFDEKVKISDHHDQHASSYNKVEEEEDKEKKHETLLQKLHRSESSSSSSSDEEEDEEKKKKRKEKKGLTDKIKEKISGDEHKEEGYHKEEDTAVPVEKVYEEEHHHPAPAPAPVVHYHEEPTDSPTEEKKGFLEKIKEKLPGHKKTEEVPVGAASHEQHSDDKHAAEPPVAASYEAGEEPKEKKGILEKIKEKLPGYHSKPEEDHKDIKEKEKDTPSY
Musa acuminata	MaDHN-SK	ND		130	MAEEHHKAVESGEEVEVQDRGLFDFLGKKKEEEKTEECHEEVLVSGVEKIHLEEAGKEEDKKEGLLEKLHRSHSSSSSSSSSDDEEEDGGENKEKKKKKKGLKEKIKEKLGCEKKEGEEEAKRRRVSWGS
Musa acuminata	MaDHN-SK	ND		96	MPATQGYGVGAGAAGKEQHHGGGGITGMLHRSGSSSSSSSSEDDGQGGRRKKKGLKQKIKEKLPGGHKEHESSVEKQHEKKGFVEKVKEKMPGHHKE
Musa acuminata	MaDHN-SK2	2.66	164-179	220	MAEEHNKAMESGEEVAVQDRELFDFMEKKKDEERKECHEEEEVLVTGVEKVQIEEGEKANEEEKMGLLEKLHRSHSSSSSSSSDDEEEAEGENKEKKKKKKKGLKEKIKEKLVCEEEAKKPEVDEGTAVVVEKMQEDTVKVEATPPEQEKGLLEKIKEKLPGHKKPADEAPAPPSPCAGHGEEHERDEGKEKKGILGRIMEKLPGYHKTEEKGEKKSPSK
Opuntia streptacantha	OpsDHN1-SK3	3.80 8.06	146-166 237-248	248	MAEEHQKGDNVNVESSDRGLFDFMKKNKESGDEKKDQEEVIATEFHHKVEVSKEDKHDENKEGGLLHKLHRSDASSSSSDEEEGDDEDKKRRKKEKKEKKGLKEKIKEKLPGHHKEQEEEQEDKQKDHHHHHHDEEDTNIAIEKIHVEEVIYSEPSYPAPAPPPPHLEAEGEKKGLLEKIKDKLPGQHKKAEAEHEVVPTATATVAEGEAQEKKGFLDKIKEKIPGFHFKAPEEDKKDVECDQPPSST
Oryza sativa	OsDHN1-SK3	7.14 14.84	213-238 238-252	290	MEDERNTESHQGGEAAEQVEVKDRGLFDNLLGRKKDDQPEEKKHEEELVTGMEKVSVEEPKKEEHHAEGEKKESLLSKLHRSSSSSSSSSDEEEEVIDENGEVIKRKKKKGLKEKIKEKLPGHKDHAGEHAPPPAATGFPAPAPASVVTAAPTPAPAPVVTHGDHHHDTAVPVEKIEGDHAKTEATLPRAPEEEKKGFLDKIKEKLPGGHKKPEDATAVPPPAASPAAPATTPAPAHPPPAATEEVSSPDGEKKGILGKIMEKLPGYHKGSGEEDKTAA
Populus canadensis	Peudhn1-SK2	2.52	39-52	225	MAEGNKSHEYETKVGEESGAVETKDRGLFDFLGKKEEEKPQEEVIATDFEEKLQVSEPETKVEEEHKKKEEEEKKPTLFEKLHRSGSSSSSSSSDEEEGDDEEKKKKKKEKRSLKEKMKISGEKGEEKEHEDTSVPVEVVHTETPHEPEDKKGFLDKIKEKLPGHKKADEVPPPAPEHVSPEAAVSHEGDAKEKKGLLEKIKEKIPGYHPKTEEEKEKEKESASQ
Populus trichocarpa	PtrDHN-3-SK2	3.84	39-52	226	MAEENKSHEYETKVGEESGAVETKDRGLFDFLGKKEEEKPQEEVIGTEFEEKLQVSEPETKVEEEHKKKEEEEKKPTLFEKLHRSGSSSSSSSSDEEEGDDEEKKKKKKEKRSLKEKMKISGEKGEEKEHEDTSVPVEVVHTETPHEPEDKKGFLDKIKEKLPGHKKADEVPPPAPEHVSPEAAVSHEGDAKEKKGLLEKIKEKLPGYHP KTEEEKEKEKESASQR
Prunus pérsica	PpeDHN1-SK2	ND		182	MADHYPKETKESQPSTKVGEEGQGCGMFDFLKKKENEKPHQEQEQHKHTLAEKLHHHGGDSSSSSSDEEGGEKKKKGLKGKIKEKKSGKKEEGDAYHASVPVEKTHDIENGAPHADDKKGFIEKIKEKLPGQQKKEAEHGAHAEYHAMDDHSHEAEPKKGILEKIKDKLPGGHKNEEEKPKEY
Prunus pérsica	PpeDHN2-SK2	0.37	184-198	254	MAEEYNKSQDRGYEGKAGEYEEGSGARAAECGEIKDRGLFDFLGKKEAEKPQEEVIVTEFEKVKVSDHEAPHPHHHEPESYKVEQEEDKEKKHGSLLEKLHRSDSSSSSSSDEEEGEGGEKKKKKEKKGLKEKICGDHDQKVEDTAVPVEKIYEEPTHEEKKEEEKKGFLEKIKEKLPGQQKKPEEIPASYDDQQCHAQHAEPAEPAGVGCEPKEKKGILEKIKEKIPGYHPKTEEEKEAIKEKEKETSSY
R.catawbiense	RcDhn5-SK	1.80 24.98	170-199 224-235	240	MAEQPDHHQHHHHVEEKSGECGGAGKTGEVPIETADRGLFDFTAVKQKEECCEEIKTTHHVEEQDEVIGAEFDKLHVSEPEHKEEEKKGSLLEKFHRSDSASSSSSSDEEGEDEEKKKKKKEKKKHEEDTNVPIEKYEEEAVAQPEEKKGFLDKIKEKLPGQHKKTEEAAVAPPPPPPVVVECYAAEESSQVGHEADQPKEKKGFLEKIKEKIPGYHPKSPTSSPSEEEKEKED
Setaria itálica	SitDHN2-SK2	17.43	194-205	290	MEDERNTQLHHQGGEAQEKAADQVEVKDRGILDTLLGRKKPEDQEKKQEEELVTGMEKVTVAEPEKHEHKKEEHEAGEKKESLLAKLHRTSSSSSSSSSDEEEEVIDENGEIVKRKKKKGLKEKIKEKLPGHKDHAEGEHHTAVPAPAPAPVETHAYKEDDHKPYVPAPAPPPVETHVHHHDHAVVVQKIEDDAKTDAPPAPEEEKKGLLDKIKEKLPGGHKKPEDAAGAPAVHAPAPTPHTEDVSSPDGKEKKGLLGKIMDKIPGYNKGSGEEDHKAAGAAAGEHKTTSS
Setaria itálica	SitDHN3-SK2	ND		138	MEHQGQHGHATNQANEYGNPVAAGHGATGVGAAGDQVQPMRDDHHKTDGLLRRSGSSSSSSSSEDDGMGGRRKKGIKEKIKEKLPGGNKDSTGQQHTTTGGAVGQQGHAGATGTGAHGTEGTGEKKGLMDKIKEKLPGQH
Setaria itálica	SitDHN5-SK2	ND		138	MEYQGQHGHATNQANEYGNPVAAGHGATGVGAAGDQVQPMRDDHHKTDGLLRRSGSSSSSSSSEDDGMGGRRKKGIKEKIKEKLPGGNKDSTGQQHTTTGGAVGQQGHAGATGTGAHGTEGTGEKKGLMNKIKEKLPGQH
Stipa purpurea	SpDHN1-SK3	6.19 17.87	217-232 171-182	271	MEDERNTQSYQSGEADQVEVKERGLFDSLLGEKKQEEDKKQEEVLVTGMEKVSVEEPEVKEEEHEGGEKKESLLSKLQRSDSSSSSSSDEEEEVIDENGEVIKRKKKKGLKEKIKEKLPGHKDHVEGEHVAAAPAPVTVTHGGHHDTPAPVTHGGHHDTDVVEKVEFEGDVKTEAPPAPEEEKKGFLEKIKEKLPGGHKKPEDAAAVPATHAAPAPAHAPAPVTEEVSSPDGKEKKGILGKIMDKLPGYHGKAAGEEDKAATAAAAEHKTSG
Theobroma cacao	TcDHN-SK2	9.63	100-112	173	MEGHHAEGDHNKAVETTDRGMFDFLKKEDEDVAMADAHKPNNAKEKEKPKEKLHRADSNSSSSSDEEEEGEDGEKKKKKKKGLKGKIKEKISGDKEATEHKDTSIPTANPEEKKGFLDKIKEKLPGQNKKPEDNALDGHPAEREPKEKGILEKIKEKIPGYHGHKTEEDKGKEN
Theobroma cacao	TcDHN-SK3	ND		234	MAEEHHSKAPECESNVAGEGAVETKDRGLFDFLGKKEEEKKPQEEVIATEFDEKVKIEETKVEEEHKKAEGEEKKHSLLEKLHRSDSSSSSSSDEEEGEGEEKKKKKKEKKKGLKEKIEEKLGGEKKEEEMKHEDTSVPVEKCAEPVVQAEPEKKGFLEKIKEKLPGQYKKAEEVPPPPPPPPAECVAAEPHEGAEAKEKKGILEKIKEKLPGYHSKTEEEKEKEKESASH
Triticum aestivum	TaWCOR410-SK3	5.56 7.38	211-226 164-176	262	MEDERSTQSYQGGEAAEQVEVTDRGLLGNLLGKKKAEEDKEKEEELVTGMEKVSVEEPEVKKEEHEDGEKKETLFSKLHRSSSSSSSSDEEEEVIDDNGEVIKRKKKKGLKEKLKEKLQGKLPGHKDTEGEHVTGLPAPAPASVQTHGGHHDTDVVEKIDGDVKTEAAPAVPEEEKKGFLEKIKEKLPGGHKKPEDAAAVPVTHAAPAPVHAPVAPEEVSSPDAKEKKGLLGKIMDKLP GYHKTGEEDKAAATGEHKPSA
Triticum aestivum	TaWCOR410b-SK3	2.63 12.28	217-232 162-174	268	MEDERSTQSYQGGEAAEQVEVTDRGLLGNLLGKKKAEEDKEKKEEELVTGMEKVSVEEPEVKKEEHVDGEKKETLFSKLHRSSSSSSSSDEEEEVIDDNGEVIKRKKKKGLKEKLKEKLPGHKDTEGEHVTALPAPAPASVQTHHDTDVVVEKIDGDVKTEATPAVPEEEKKGFLEKIKEKLPGGHKKPEDAAAVPVTHAAPAPVTHAAPAPVHAPAPAAEEVSSPDAKEKKGLLGKIMDKLPGYHKTGEEDKAAATGEHKPSA
Triticum aestivum	TaWCOR410c-SK3	2.63 7.38	208-223 161-173	259	MEDERSTQSYQGGEAAEQVEVTDRGLLGNLLGKKKAEEDKEKQEELVTGMEKVSVEEPEVKKEEHEDGEKKETLFSKLHRSSSSSSSSDEEEEVIDDNGEVIKRKKKKGLKEKLKEKLPGHKDTEGEHVTGLPAPAPASVQTHHDTDVVEKIDGDVKTEAAPAVPEEEKKGFLEKIKEKLPGGHKKPEDAAPVPVTHAAPAPVHAPAPAAEEVSSPDAKEKKGLLGKIMDKLPGYHKTGEEDKAAAAAGEHKPSA
Zea mays	ZmDHN-SK	14.01	193-205	289	MEDERNTQQHQGGEQAQDQENEVKDRGLLDSLLGRNKHDDQEKKNQEEEELATGMEKVTVAEPDHKEEGHEAAEKKDSLLAKLHRTSSSSSSSSDEEEEVIDENGEIVKRKKKGLKEKVKEKSAAHKAHDEGDHHQPGVPAPAPAPPVAVDTHAHHQEGEHKPHFPAPAPPPHVETHHPVVVHHKIEDDDTKTQTPPQAPEEEKKGLLDKIKEKLPGGHKKPEDAAAAAAPAVHAPPPPAAPHAEVDVSSPDGKKGLLGKIMDKIPGYHKSSGEEDRKDAAGEHKTSS
Zea mays	ZmDHN-SK3	0.49 1.19	235-252 139-153	290	MEDERNTQQHQGGEAQQDAADQVDVKDRGLLDSLLGRKKHDDDQEKKKQTDELATGMEKVTVSEPEKHGHKEEEHEVVGEKKEGLLAKLHRTSSSSSSSSDEEEEAIDENGEIIKRKKKKMGLKEKLKEKLPGHKDGHHTAAPSPAPAPVETHAHHQEEAHRPHVVPTPAPPPPHVHQHDHGVVQDDVKTGTPPHAPEEEKKGLLDKIKEKLPGGHNKKPEAAAAAAPAPPVHAPAPAPQAENVSSPDGKEKKGLLGKIMDKIPGYHKSSAEEADHKADAAGEHRTSS

YSK-Type

Specie	Access number/Name	PEST score	Position	Protein size	Sequence
Arabidopsis thaliana	AT3G50980-YSK2(Xero/LT145)	ND		128	MESYQNQSGAQQTHQQLDQFGNPFPATTGAYGTAGGAPAVAEGGGLSGMLHRSGSSSSSSSSEDDGLGGRRRKKKGITEKIKEKLPGHHDSNKTSSLGSTTTAYDTGTVHHEKKGMMEKIKEKLPGGHH
Arabidopsis thaliana	AT5G66400-Y2SK2(RAB18)	ND		186	MASYQNRPGGQATDEYGNPIQQQYDEYGNPMGGGGYGTGGGGGGATGGQGYGTGGQGYGTGGQGYGSGGQGYGTGGQGYGTGTGTEGFGTGGGARHHGQEQLHKESGGGLGGMLHRSGSSSSSSSEDDGQGGRRKKGITQKIKEKLPGHHDQSGQAQAMGGMGSGYDAGGYGGEHHEKKGMMDKIKEKLPGGGR
Avicennia marina	AmDHN1-YSK2	2.92	61-91	195	MAEYGDQYGRQTDEYGNPIRQTGEFGATGAGYGANQQYGTTGTTVGYGTDQCVTTVTTGAQKTDQYGTPGTTGAYGTDQYGTTGTTGEYGTHGGGIAPGATDAGLAGGGGHRRLGSSGSSSSEDDGQGGRRKKGIKEKIKEKLPGGGHGDDQTHPTPPGSGGYGYEHGGAAESPEHEEKKGIMDKIKEKLPGGHH
Brachypodium distachyon	BdDHN-YSK	ND		157	MDRYQGQGGYGANQVDEYGNPVARHGATGGMGGTYEAPGAFTGTGGGQGQGQQFQPTNGEHKTGGILHRSGSSSSSSSSEDDGVGGRRKKGMKEKIKEKFPGGHKENQQHMAAGTGGAYGQQGGYGGMTGTGAGAHGVDTGEKKGLMDKIKEKLPGQH
Coffea canephora	CcaDHN-Y3SK	ND		162	MADLRDEYGNPMQLTDQYGNPVQLKDEYGNPMQLSGVAITAGTASAVHSTGTGPTAATGTQQHQEQLHRSSSSSGSSEDDGQGGRRKKKGLKEKIKEKLTGGRHKDRDDQEHIDDQHAHSASPPTTTGSGTSTTVGGQQHEKKSMVEKIMEKLPGHHDTR
Coffea canephora	CcaDHN-Y2SK2	ND		172	MAQYGAEYGNQKSQYDEYGNPVRQTDEYGNPARHGGTMGDYGTTGTTGAYGGTTGAHGTYATGTTGTTGTGAYATQPGTDVGKEHHGLGGMLHRSGSSSSSSSEDDGQGGRRKKGMKEKIKEKLPGGHKEAQPGQEYSSATAAPGYGGEGVQHEKKGIMDKIKEKLPGGHHN
Hordeum vulgare	DHN1-SK	ND		139	MEYQGQHGHATDKVEEYGQPVAGHGGFTGGPTGTHGAAGVGGAQLQATRDGHKTDGVLRRSGSSSSSSSEDDGVGGRRKKGMKEKIKEKLPGGAHKDAAGQQQTAMAGEYAGTHGTEATGEKKGVMDKIKEKLPGGQH
Hordeum vulgare	DHN2-SK	ND		143	MEYQGQTGHATTDKVEDYGQPVAGHGGATGGPTGTHGAAAAAAGTGQLQPTRDDHKTDGVLRRSGSSSSSSSEDDGVGGRRKKGMKEKIKEKLPGGAHKDAAGQQHTPAAGEYAGTGTHGAEATGEKKGVMDKIKEKLPG GQH
Hordeum vulgare	DHN3-YSK	ND		155	MEHGHATNRVDEYGNPVAGHGVGTGMGTGAAAGGHFQPTREEHKAGGILQRSGSSSSSSSSEDDGMGGRRKKGLKDKIKEKLPGGHGDQQQTGGTYGQHGHTGMTGTGEHGATATGGTYGQQGHTGMTGTGAHSTDGTGEK KGIMDKIKEKLPGQH
Hordeum vulgare	DHN4-YSK	ND		247	MEYQGQQQQHGRVDEYGNPVAGHGVGTGMGTHGGVGTGAAAGGHYQPMRDEHQTGRGILHRSGSSSSSSSSEDDGMGGRRKKGIKEKIKEKLPGGHGDQQHNAGTYGYGQQGTGMAGTGGTYGQQGHTGMTGMGATDGTYGQQGHTGMAGTGAHGTAATGGTYGQQGHTGMTGTGMHGTGGTYGQQGHTGMTGMHGTGGTYGQQGHTGMTGTGMXGTGGTYGQHGTDTGEKKGIMDKIKEKLPGQH
Hordeum vulgare	DHN6-YSK	ND		502	MAHFQGQQHGHPATRVDEYGNPVTAGGHGGGVTGTDGLGHFQGQQHGRTTTRLDEYGNPVTAGHGVGAGSTGTEVHGPGHAGYGSTGTNDTGGHGRQVGYGATGTGTHDADGGYGGSGIAPRHGGAGTGVHDAGGLGHTTGHGATSTHGTGHTAGYGSTGTGMTGTHGTGHTAGYDATGTGITGTHGTGHTTGYGGTGTHGTGHTAGYDATGTGIAGTHGTGHTGTGRTAGYGGTGTGTHGTGHTTGYGGGATGTGITGTHGTGHTAGLGGTGTGITGTHGTGHTTGYGGVTGTGITGTHGTGHTTGLGGTGTGITGTHGTGHTAGLGGTGTGITGTHDVVGTHPHGGLGEHKTGGILHRSGSSSSSSSSEDDGMGGRRKKGMKQKIKEKLPGGNKEQTTATGGYGPGYTGTTG
Hordeum vulgare	DHN7-YSK	ND		181	MEYQGQQGHGQATNRVDEYGNPVAGHGGGTGMGAHGGVGTGAAAGGHFQPTRKEHKAGGILQRSGSSSSSSSEDDGMGGRRKKGIKDKIKEKLPGGHGDQQHAAGTYGQQGIGMAGTGGTYGQQGHTGMTGTGATGTMAT GGTYGQPGHTGMTGTGHTGTDGTGEKKGIMDKIKEKLPGQH
Hordeum vulgare	DHN9-YSK	ND		146	MEFQGQHDNPANRVDEYGNPFPLAGGMGGAHAAPGTGQFQARREEHKTRGILHRSGSSSSSSSSEDDGMGGRRKKGMKEKIKEKLPGGHKDNQQHMATGTGTGGAYGPGTGTGGAYGQQGHAGMAGTGEKKGIMDKIKE KLPGQH
Hordeum vulgare	DHN11-YSK	ND		232	MADYGGEYGHPYPRVDEYGNPVPPVDQYGNPIPREPGQAPAYGSAGAVTPAAEYGAGVKPGYGLGGAVHPHESVVGGAVPPSGAAYAHEGAVSGGLAPGETTAYAYEGAVSGGLAPGETTAYAYEGMVGSGIGAGAGDRIQPAKEEHTTLGEALRRSGSSSSSSSSEDDGQGGRQRKKKGIKEKIKEKLPGNQKHEEHKAGHAAAPAAGTGTHEKKGIMEKIKEKLPGHH
Lycopersicum	LyDHN-Y2SK	ND		157	MAHYENQYSAGQALQTDEYGNPVRQTDEYGNPIQQTGGTMGEYGTTGTGYGTQAGHTSGVLGGEQRQHGTLGGMLHRSGSSSSSSSSEDDGHGGRRKKKGIKDKVKEKLPGGHRDDQAHSTATTTTGYGMEGTHEKKGIMEKIKEKLPGHHGPGHH
Malus domestica	MdDHN1-YSK3	3.61 10.19	102-122 152-169	188	MSHLHNQHGAQPTDAYGNPIQRTDEYGNPLGGATTGAATGGYGAHDTAAATTGHDYGRKEHHGVTGALHRSGSSSSSSSEDDGLGGRRRKKGLKQKTKEKLHGGSTTTDTTYGTAGTTYPGGHQQEKGMMDKIKDKLPGTGHKDHPHYSTTHATTTTPPGGATYTEEHHEKKGIMDKIKEKLPGGNH
Malus domestica	MdDHN2-Y2SK3	0.57 0.57	106-127 142-163	230	MSNYGNTTAEKTTEEYFGNPTYNGSAGADRTDEFGNAVQHGRTNTGYGTADPKTRDEGIVGHHGGPAVLQRSGSSSSSSSEDDGLGGRRKKGLKEKIKEKLPGGGNKDDQYSGGTQTTTPYGGGTTYKVGEQRQEKLPGGGNKDDQYSGGTQTTTPYGGGTTYKVGEQHQEKGTTDKIKKKLPGGNRDDQYSHDTSTTAAAYGGTGRTGEPQEKKNMMDKIKEKLPGGHAE
Malus domestica	MdDHN4-YSK3	0.72	109-129	232	MANYGSTPEKTNENYGNPTYNGSAGAGRTDELGNVVQHGRTDTGYGTAHAKPGDEVIVGRHGGPAVLQRSGSSSSSSEDDGLGGRRKKGLKEKIKEKLPGGNKDDQYTHGTQTTAPYGGGTTYTEGEHHQKRGVMDKVKEKLPGGGNKDDQYSHGTQTATPYGGGTTYAGEGERDQKKGVMDKVKEQLPGGASKDDQYSHAKPWDHLCRRRAPPEKGCDGQGKGEAARRC
Oryza sativa	OsRAB16B-YSK2	ND		164	MDNYQGQHGYGADRVDVYGNPVGAGQYGGGATAPGGGHGAMGMGGHAGAGAGGQFQPAREDHKTGGILHRSGSSSSSSSSEDDGMGGRRKKGIKEKIKEKLPGGNKGNNHQQQQMMGNTGGAYGQQGHAGMTGAGTGVHGAEYGNAGEKKGFMDKIKEKLPGQH
Oryza sativa	OsRAB16C-YSK2	ND		164	MENYQGQHGYGADRVDVYGNPVAGQYGGGATAPGGGHGVMGMGGHAGAGGQFQPVKEEHKTGGILHRSGSSSSSSSSEDDGMGGRRKKGIKEKIKEKLPGGNKGNNQQQQQMMGNTGGAYGQQGHAGMTGAGTGTGVHGAEYGNTGEKKGFMDKIKEKLPGQH
Oryza sativa	OsRAB16D-YSK2	ND		151	MEYQGQHGGHASSRADEHGNPAVTTGNAPTGMGAGHIQEPAREDKKTDGVLRRSGSSSSSSSSEDDGMGGRRKKGIKEKIKEKLPGGNKGNNQQQQQEHTTTTTGGAYGPQGHGTDTKIATGAHGGTAATTADAGGEKKGIVDKIKEKLPGQH
Oryza sativa	OsRAB21-YSK2	ND		172	MEHQGQHGHVTSRVDEYGNPVGTGAGHGQMGTAGMGTHGTTGGMGTHGTTGGMGTHGTTGTGGGQFQPMREEHKTGGVLQRSGSSSSSSSEDDGMGGRRKKGIKEKIKEKLPGGNKGEQQHAMGGTGGAYGQQGHGTGMTTGTTGAHGTTTTDTGEKKGIMDKIKEKLPGQH
Oryza sativa	OsRAB25-YSK	ND		228	MAEHATGVYGHPYPRVDQYGNPVPPVDQYGNPVPDEPAPRDTAAGYVAPPDPAVSTGDYGLAGAEAPAPARERGDERRSRRCRRTRRRGVHARRRRSSPGRREDVRLRGHGQRRRLTGASGQLQPTTREEGHTTLGETLRRSGKSSSSSSSEDDGQGGRRKKKSIKEKIKEKLPGSHKQEEQKQAGHTAPAAGTGTGTHAAGKHEKKGIVEKIKEKLPGHGHH
Populus trichocarpa	PtrDHN-2-Y3SK2	5.32	149-165	183	MIAATIVDELGNPIQLTDEHGNPVKLTDEHGNPVHIAGVATTKQPPTLGDIISTDTVPGTGHLSSTARSEDAMKGGLRETGHHGEVAGDQGGHKKEEHDETSSTSSSGSSEDDGQGGRRKKKKGLKQKIKEKLTGGKHKEEHGHTVDVHTTTTGPAGEQYQEQEKKSVIEKIKGKLPGHHSHH
Prunus pérsica	PpeDHN3-Y2SK3	2.88 4.88	33-52 167-184	202	MASYEKQYGATPTDEYGNPIRRTDEYGNPLGHHTTTTGTTAATTGAGGYDPHDFAATTVAGQGQGVHGHDYDRKGHHGVTGAVLHRSGSSSSSSSEDDGLGGRRKKGLKEKVKEKLPGGTKTDTTYGGTGTTGQHHQEKGTMDKIKEKLPGTGGHRADDPYPSQTHTTATTTPYGGTAYTEEHQEKKGIMDKIKEKLPGQH
Setaria itálica	SitDHN1-Y2SK2	ND		223	MAEYHGEYGHPYPRVDEYGNPVPPVDQYGNPVPREPASAGLGGTAPLYGAAGDTTGAGYVAAPPGDYGTAGGAAYPSSGVAPGETALAYEGMVGGGGIGAATAGMGGQLQPTREEEHTFGSSQLEPASREEHTTLGEKLTRSGSSSSSSSSFEDDGQGGRRKKKSIKEKIKEKLPGTHKHEERKAGHAAPATTTTGTTHAAGAHEKKGFMDKIKEKLPGHH
Setaria itálica	SitDHN4-YSK2	ND		169	MEYGQQGQHGHGTAGRVDQYGNPVGGVGHGTTGTGTGGMGTGYGTTGTGGMGQLGEHGGAGMGGGQFQPVREEHNTGGILHRSGSSSSSSSSEDDGMGGRRKKGIKEKIKEKLPGGRKDDQHATATGGTYGQQGHTGMTGTGTGGAYGTEGTGEKKGIMDKIKEKLPGQH
Solanum lycopersicum	SlTAS14-YSK2	ND		130	MAQYGNQDQMRKTDEYGNHVQETGVYQGTGTGGMMGGTGTGGMMGGTGGEYGTGQMGTGTHHHEGQQQLRRSDSSSSSSEDDGEGGRRKKGLKEKIMEKMPGQHEGEYGQTTGEEKKGMMDKIKDKIPGMH
Sorghum bicolor	SbiDHN-YSK2	ND		152	MEYGQQGQHGHGTTGRVDQYGNPVGAGTGGMGTGTGGMGQLGEHGGAGMGGGQFQPAREEHKTGGILHRSGSSSSSSSSEDDGMGGRRKKGIKEKIKEKLPGGHKDNQHATATGGGAAYGQQEHTGAGTYGTEGTGEKKGIMDKIKEKLPGQH
Theobroma cacao	TcDHN-YSK	ND		169	MADLRDVHGNPIQLTDEQGNPVQPTDEYGNPVHVTGIASKHPVMTQTGVPGGQMGYETGSAAGYQQQQHPQQLHYEASSGVEIQRSNSSSSSGSSEDNEIGGRRNKKGLKDKIKDKLTGGKHKEEAQSQTTTYESKTTTTGVSHGQHHTEHEKKTMMEKIKEKLPGCHSH
Triticum aestivum	TaDHN7-Y2SK2	ND		213	MADYGGEYGHPYPRVDEYGNPVPPVDQYGNPIPREPGQVPAYTSGGAAPPYSSDGAGAVTSADYGAGVTPGYGLSGAVHPQESVVGGAVFPSGTAHTHEGALSGSLAPGETTAYAYEGMVGSGIGTGDQIPTKEGHTTLGETLRRSSSSSSSSSSEDDGQGGRQRKKKSMKAKIKEKLPGSHKQEEHKAGHTVPPAGTGTHEKIKEKLPGHH
Triticum aestivum	TaWZY2-12-YSK2	ND		152	MEYQGHQQHGQATNRVDEYGNPVAGHGVGTGAAAGGHFQPSGEEHKAGGILQRSGSSSSSSSSSEDDGMGGRRKKGIKDKIKEKLPGGHGDQQQTTDNTYGQQGHTAGMAGTGGTYGQPGHTGMAGTGTHGTDGTGEKKGV MDKIKEKLPGQH
Triticum aestivum	TaWZY1-1-15YSK2	ND		160	MEHGQATIRVDEYGNPVAGHGVGTGMGAHGGSGTGAATGGHFQPTREEHKAGGILQRSGSSSSSSSSEDDGMGGRRKKGIKDKIKEKLPGGHGDQQHADGTYGQQGTGMAGTGAHGSAATGGTYGQPGHTGMTGTGTHVTD GAGEKKGIMDKIKEKLPGQH
Triticum turgidum	TtDHN15.1-YSK2	ND		149	MEFQGQHDNPANRVDEYGNPFPLGGVGGAHAAPGTGQGLQARRGEHKTGGILHRSGSSSSSSSSEDDGMGGRRKKGMKEKIKEKLPGGHKDNQQHMATGTGTGGAYGPGTGTGGAYGQQGHAGMAGAGTGTGEKKGIMDKIKEKLPGQH
Triticum turgidum	TtDHN11-YSK2	ND		158	MEYQGQQQHGQAATNRFAEYGNLVAGHGAGTGMAAHGGVGTGAVAAAGGHFQPTREEHKAGGILQRSGSSSSSSSSEDDGMGGRRKKGIKDKIKEKLPGGHGDQQQTAGTYGQQGHTGTAGTGGTYGQPGHTGMAGTDSTGEKKGIMDKIKEKLPGQH
Triticum turgidum	TtDHN16-YSK2	ND		227	MEFQGQHDNPANRVDEYGNPFPLAGGVGGAHAAPGTGQQFQAHRGEHKTGGILHRSGSSSSSSSSEDDGMGGRRKKGMKEKIKEKLPGGHGDQQHTGGTYRQQGTGMVGTGGTYGQKGHTGMTGTGGTYGQQGHTGMTGTGGTYGQQGHTGMTGTGGTYGQQGHTGMAGTGAHGTTATGGTYGQPGHTGMTGTGAHGTGGTYGQHGTDTG EKKGIMDKIKEKLPGQH
Utricularia Gibba	UgDHN-YSK	1.64 7.24	87-102 102-115	133	MAELRDEHGNPVQLTDQFGNPVQLTDEYGNPVHLKGVATPEHAREQLQRSGSSSSSSSSEDDGQGGRRKKGLKEKVKEAIGGGKHQEKEIAPETAMTTMAEEKTPTDAGGAPEQEKKGIMEKIKEKLPGHHRQH
Vitis riparia	VrDHN1-YSK	ND		130	MAYQQDPCANPTRQTGKTGGQTDQYGNPVHQTEALGAYGAGTGTGMHGGEHQQQPHQQPGVLHRSGSSSSSEDDGQGGRRKKGMKEKIKERIPGMGRKDEQKQTSATSTPGQGQQQKGMMEKIKEKLPGAH
Vitis riparia	VrDHN1a-YSK2	ND		130	MAYQQDPCANPTRQTGKTGGQTDQYGNPVHQTEALGAYGAGTGTGMHGGEHQQQPHQQPGVLNRSGSSSSSEDDGQGGRRKKGMKEKIKERIPGMGRKDEQKQTSATSTPGQGQQQKGMMEKIKEKLPGAH
Vitis vinifera	VvDHN1a-YSK	ND		130	MAYQQDPCANPTHQTGKTGGQTDQYGNPVHQTEAMGAYGAGTGTGMHGGEHQQQPHQQPGVLHRSGSSSSSEDDGQGGRRKKGMKEKIKERIPGMGRKDEQKHTSATSTPGQGQQQKGMMEKIKEKLPGGH
Zea mays	ZmRAB17-YSK2	ND		168	MEYGQQGQRGHGATGHVDQYGNPVGGVEHGTGGMRHGTGTTGGMGQLGEHGGAGMGGGQFQPAREEHKTGGILHRSGSSSSSSSSEDDGMGGRRKKGIKEKIKEKLPGGHKDDQHATATTGGAYGQQGHTGSAYGQQGHTG GAYATGTEGTGEKKGIMDKIKEKLPGQH
Zea mays	Zm00008a019720	1.76	22-44	169	MTVDASVTNGDFFTYPFVLNKHFLAEVSGDSDDGLDEGSLTAPKRANQDHRRIAFSSLPFPEQREVATSMSGIIDKIQETLHIGGDHKEEHEHKKGEEHHKKDDGEHKEGIVEKIKDKITGEHGDKSGDHKDKDHKEKKDKKKKKEKKHGEGHDHGDGDGHSSSSSDSD

K-Type

Specie	Access number/Name	PEST score	Position	Protein size	Sequence
Aquilegia coerulea	AcoDHN-K	ND		163	MATEQNQIPKAHVTNEEEGQHEHEHHTMLDFLEKKEEQKPTDELSVNEFVKDHVSKSEEKKEEEEEHKPTSAPNVDRSSDIHSSGDVTHPEETEEKNLMEKIKNKLPGAHKKTDEVAPVEHHPTETKTNIHQDKPEEKKGLMEKIKEKLPGHKNKSVEEEKGAI
Arabidopsis halleri	Araha.12526s0002-K2	ND		106	MQSSDEEAGENGEKKEKEKKNKKKKEVVADQCETEEKNKEKLPAGIGHEDGKEKGFMEKMKDKLPGGHHGKPEAEPHNDKGKEKGFMEKIKEKLPGHTNDEKKKET
Arabidopsis halleri	Araha.41700s0001-K2	ND		71	MHEGGGWTRWNGRRRKKKGITEKIKEKLSGHHESNKTSLGSTTTAYDTGTVHHEKKGMMEKIKEKLPGGHY
Arabidopsis lyrata	XP_020882347.1 dehydrin Xero 2	ND		213	MDSYQNQTGVPKKGMTEKIMEKLPGHHGTHQTHGTNTGYGNTGGVHHEKKGMTEKVMEQLPGHHGTHQTHGTNTGYGNTGGVHHERKGMTEKVMEQLPGHHGTHQTHGTNTGYGNTGGVHHEKKSMTEKVMEKLPGHQGSHQTGTNTGYGATNTNVVHHQKKGIAEKIKEQLPGHHGAHQTGTTANYGNTGGVHHEKKSTIDKIKEKLPGGHH
Arabidopsis thaliana	AT3G50970-K6(Xero2/LTI30)	ND		193	MNSHQNQTGVQKKGITEKIMEKLPGHHGPTNTGVVHHEKKGMTEKVMEQLPGHHGATGTGGVHHEKKGMTEKVMEQLPGHHGSHQTGTNTTYGTTNTGGVHHEKKSVTEKVMEKLPGHHGSHQTGTNTAYGTNTNVVHHEKKGIAEKIKEQLPGHHGTHKTGTTTSYGNTGGVHHENKSTMDKIKEKLPGGHH
Boechera stricta	Bostr.6864s0147-K6	ND		216	MNSYQNQSGVQKKGITEKIMEKLPGHHGSHQTGVNTAHGASGTGGVHQGPTEKIMEQLPGHHGSHQTGTNTAYGNTGGVHHERKGMTEKIMEKLPGHQGSHQTGTNTAHGATNTNVVHYEKKGIAEKIKEQLPGHHATHHTGTTTDHNTTTGHNTTGTGVVHHEKKGIAEKIKEQLPGHHGSHQTGTTTGYGNTGGVHHENKSTMDKIKEKLPGSH
Capsella grandiflora	Cagra.2007s0059-K2	ND		143	MASYQNRPGGATGGTYGTGGQGYGTGTGTEAFGTGGGARHHGQEQLHKESGGGLGGMLHRSGSGSSSSSEDDGQGGRRKKGITQKIKEKLPGHHDQSSQAQGMGGMGTGTTGYDAGGYGGERHEKKGMMDKIKEKLPGGGGR
Citrus clementina	*Ciclev10029952m.g-K4*	8.52	42-58	167	MADHQQQGNEAKGCGMFDFLKNKNEEKSQDAAMVDVETKEEKPAFSSEEEIEGADGEKKRKKKKGLKEKIQEKISSEKEEENAVEKNDEIASAEATHLEEKKGFLEKIKDKLPGQHKKAEEGAACAGCCPNEHLAEGDEKEKKGILEKIKELPGYHSEDEKAKHKDN
Citrus sinensis	orange1.1g036567m.g-K	ND		73	MSGVIHEIGEALHVGGGQKEDKHKGEHHSGDQHTTDVHHQQYHGGEHREGEHKEGLVDKIKQKIPGARRRPR
Glycine max	Glyma.08G048900-K	ND		91	MAHYQNQYGAVPVSKDPIQKEKETNGDTTGIAVDGGGVAGSTQVIAEEDYDHRRTTTTTTTTTAVDNHPHKKGIIEKIKEKLPGTHHHHNNK
Gossypium raimondii	Gorai.013G180700-K	ND		117	MLPMFRLHTLAGSFSCSLLVQHILFLQKNINKDASMELLDFSQGFSGTHFKGKSSSFQKKLGFLKSGKEGSKNLQNDKKQKGETKEKKRFLEKIKEKIPGYHSKTEDEKEKETTAPH
Hordeum vulgare	DHN5-K	ND		575	MEHQAHVAGEKKGIMEKIKEKLPGGHGDHKQAADTHGQQGHAGTGTHGAPATGGAYEQQRGTGVTGTGLNGADAGEKKGLMEKIKDKLPGGHGDQQTTAGTYGQQGHTGTAAHGTPAGGGTYDQEGHTGMSGMGAHDTHTTGGAYGGQHAHTGGTGTGTHGTGEKKGVMENIKDKLPGGHGDHQKTSDTYGHQEDTEMTGMGRHSTPATGGSYGGQHVHTGQTDMGTHGTGEKKGVMENIKDKLPGGHDDHQKTAGTYGQQGHVGTGTHGTPATGGAYGGQHEHTGATGTGTYGTGEKKGIMENIKEKLPGGHGGHQKTGDTYGHQEDTKMTGMGRHSAPATGGSYGQHAHTGETGTGTHGTGEKKGVMENIKEKLPGGHDDHQKTAGTYGQQGHVGTGTHGTPATGGAYG
Malus domestica	MdDHN3-K4	ND		177	MDKVKEQLPGGASKDDQYSHAKPTTGAHYGGGTTYAGEGEHHQKKGVTDKVKEKLPGGASKDDQYLHAKPTTGAQYGGGTTYAGEGEHHQEKGVMDKIKDKLPFGGSKDGEGERHQEKGMMDKTKEKLPGGHKDNQYSHDTSTTAATYGGTANIGEHQEKKGIMEKVKEKLPGGHKK
Malus domestica	MdDHN7-K3	7.69	38-56	124	MAGKSTMVPLACFIALAAQARALEVVGGEGLKQKIKEKLPGSTTTDTTYDTTYPGRHHQEKGMKDKNKDKLPEGHKDDPYYSTPHTTLTTTTYGVTTYMEEHHEKKGIMDKINEKLPSGHHWRL
Malus domestica	MDP0000689622-K2	ND		83	MDKIKDKLPFGGSKDGEGERHQEKGMMDKTKEKLPGGHKDNQYSHDTSTTAATYGGTANIGEHQEKKGIMEKVKEKLPGGHKK
Malus domestica	MDP0000265874-K3	5.22 7.78 0.84	11-55 98-133 156-171	190	MANYQSQYGTKPQDTDEXGNPIQQGTTGGFGSATTGTGYGTTETPYTGGQQQQERGTGMTGSGYGTTDAPYTGGQQQQERGMMDKIKDKIPGTGGGRRDDDPYSSNAQTGTGMTGTGYGTTDAPYTGGEYEERGMMDKVKDKIPGTGQRDETYSSKTASTTAPYGGTTGEHQEKKGAMDKIKEKLPGGRH
Malus domestica	MDP0000178973-K5	ND		210	MADQYPKESQTQSKGAEEEAQGCGIFDFLKKKDSEEKPHEEQEQQKHTTIAEKLHHHGGGENKKKGLKGKMKEKVSGNKEEGDAYHASVPAKNGHSDEKGFVEKIKDKLPGQHKKEAEHXAEEKGFVEKIKDKXPGQHKVAEHGAREKGFVEKIKEKLPGQHKEAGNGAHAEYHAPDGHSHDSEPKKGVLEKIKDKLPGGHKNEEKKHKEY
Malus domestica	MDP0000595271-K3	3.21 4.67	29-51 81-98	117	MVALLDQSEDDGLGGRRKKKGLKQKIKEKLPGSTTTETTYGTAGTTYPGGHQQEKGMMDKIKDKLPGTGHKDDPHYSTTTHASTTTTPYGGATYTEEHHEKKGIMDKIKEKLPGGNQ
Medicago truncatula	Medtr8g106140-K	ND		85	MDNFQNQYGAVPISNNDLIHRELDTTGVVDGGGSTQAMADTTTAVDTTTTDDGVFVDGNKTNNHHNKKGIIDKIKEKLPGTHHHK
Oryza sativa	OsLIP9-K2	7.14 14.84	60-85 85-99	137	MATPAPVVTHGDHHHDTAVPVEKIEGDHAKTEATLPRAPEEEKKGFLDKIKEKLPGGHKKPEDATAVPPPAASPAPATTPAPAHPPPATEEVSSPDGKEKKGILGKIMEKLPGYHKGSGEEDKTAAAATGEHKSSA
Phaseolus vulgaris	Phvul.002G324800-K	ND		82	MAQYQNQYGAVPISKDPVQKEMETTGDTIGVGVAGGGGGGSTQVIAEDYDSSKSNSSGEKQKKGIIEKIKEKLPGTGTHQDK
Physcomitrella patens	PpDHNB-K	8.96 6.26 7.32 9.39 3.78	22-53 171-196 197-221 102-118 279-290	290	MAAQYTQDQSTEFRPELDEPRRTTTTTTSTTGSGLENENFGGYGGVSENEPPRHKIHSEDEPLPKPMSGTYLDEEGAKLDQDSDRSGLGASDLGRDEHIMPKPTSEGYPAGTPQSTEKYQEHRDLEPTRLDESPKTEEFGAANASTGDFDRTSSDGLRTDKTPASEPRGFRSEDTAPTSGGYADPTSAFPGAPIDRRVEEPGYGYDQQTSEPTSLESGTQHSPKKEGFMTKLKEKLPGHHKTPESGVEHQGAGVEHDTTDAPPKKGLMTKIKEKLPGHHSTAPASTTTDV
Physcomitrella patens	PpDHNC-K	4.89 8.35 4.70 2.84	121-149 158-176 63-79 44-58	233	MAGYMGEERKPVSTYNAHQDEFGFKEGNDYPASGGGYGDHRHHRPDVPSSTPGEGYGRQGVEHGYGDQSEETFQDAPERLTGYGDTDNGVGGPKSGYGDSRGETAYDRATDEQTQFGVGGKENSYELEGSDPLGGTDTSSYAAVDPQRLDSDRSPIRATETVPGGDGWGPEDTSRIHGAKKDGLMNKIKEKLPGHHNTAQGEVSDPNALPKKGMMEKIKEKLPGHDSGSADV
Pistacia vera	Pv-dhn-K5	ND		230	MSGTINKVKETLHMGGQKKEGEQKGLYQGEAHKVEQHHGVCKPEHGEHKEGMVQKIKNKVPGQGDGVKQQHGVCKPEHGEHKEGLVEKIKDKVPGQGDQHGHGMQQHRGEY
Populus trichocarpa	PtrDHN-1.1	6.06 10.60 21.67 17.03 5.83 8.97	365-385 401-419 65-82 264-280 149-163 38-49	444	MAGVNKSHEYETKTSAGEESGATETKDRGLFGFMGKKKEEVPATEYEEKIHRSDNSYPGDGEKKHEDTTVPSDTETPLTPEKKKSYFEQAKGIIPAYKKTEEVPPLELKLFIRQGHPLPQRRRRRHPLTPEKKKSYFEQAKDIIPAYKKTEDGPPSPAEAAVHPTGTPLEPEKKKSYFEQAKDRYQHIRKLKSPLPVQLTKPQFIPQEKKSFFEQAKERTPGFKKTEEVSPRPAKAAAHHTETPFEPEKKKSFFEQAKERIPSYKKTEEVISTETPLEPEKKKSYFEQAKDIIPAHKTEEVPPHPAQSASNSFSHTETPFEPEEKKGFLDKVKEKDLARKKTEEKRGFLKEKVPTHKKTEEFPPKAPAYTEAAVS
Populus trichocarpa	PtrDHN-1.2	11.72 10.61 6.06 23.31 5.37 15.05	99-121 470-490 537-557 138-156 573-591 65-82	616	MAGVNKSHEYETKTSAGEESGATETKDRGLFGFMGKKKEEVPATEYEEKIHRSDNSYPGDGEKKHEDTTVPSNTETPLTPEKKKSYFEQAKDMIPAYKKTEEVPPTEAVYPSETPLTPEKKKSYFEQAKDMIPAYKKTEEVPPPTESETPLTPEKKKSYFEQAKGIIPAYKKTEDGPPSPAEAAVHPTGSRPLEPEKKKSYFEQAKDIIPAYKKTEDSPPSPAEAAVHPTGSRPLEPEKKKSYLEQAKDIIPAYKKTEDSPPSAEAAAHPTGSRPLEPEKKKSYFEQAKDIIPAYKKTEDSPPSPAEAAAHPTGSRPLEPEKKKSYFEQAKERTPGFKKTEEVSPRPAEAAVVHHTETPLEPEKKGFLDQAKERTPGY
Populus trichocarpa	PtrDHN-4-K	ND		149	MAGIMHKIEETLNIGGKKDERKGETQGGYNQQDHRGAAQGQRKEGFADQMKDKIPGGGGGVHKGETQGGYNHQDQGGYNQQEHRGGAQGERQEGFVGQMKDKLPGGGGGGGMTQGGYNQQEHRGGAQGERQEGFVGQMKDKLPGGVAVA
Populus trichocarpa	PtrDHN-5-K	ND		205	MTQGGYNQQEHRGGAQGQRKEGFVGQMKDKIPGAGGGGGGGGGMTQGGYNQQEHRGGAQGQRKEGFVDKIKGKIPGGGGASGVGGMTQGGYNQQDHRGGAQGVRKEGFVDKIKGKIPGGGGASGVGGMTQGGYNQQDHRGGAQGVRKEGFVDKIKGKIPGGGGASGVGGMRRWEINKITGAARKVCARKGVEEVEVLSTSVADYH
Populus trichocarpa	Potri.013G062300-K4	ND		218	MSARVRHKVGTTNRITGAPHKVSRQEGFVGQMKDKLPGGGGGGGMTQGGYNQQEHRGGAQGGYNQKEHRGGAQGERQEGFVGQMKDKLPGGGGGMTQGGYNQQEHRGGAQGDRQEGFVGQMKDKLPGGGGGMTQGGYNQEHRGGGVSGMTQGGYNQQEHRGGGVGVGGMTQGGYNQQEHRGDAQGERKEGFVDKIKGKLPGGGRASGVRGEGGEK
Populus trichocarpa	Potri.013G062200-K5	ND		236	MAGIVHKIEDTLNIGGKKDERKGETQGGYNQQDHRGGAQGQRKEGFVGQMQDKILGGGGGGGGGMTQGGYNQQEHRGGAQGQRKEGFVGQMKDKIPGGGGGVGGMTQGGYNQQEHRGGAQGQRKEGFVDKIKGKIPGGGGASGVGGMTQGGYNQQDHRGGAQVVRKEGFVDKIKGKIPGGGGASGVGGMTQGGYNQQDHRGGAQGVRKEGFVDKIKGKIPGGGGASGVRGVGGEK
Populus trichocarpa	Potri.002G013200-K3	9.71 15.64 6.06 10.60 5.83 9.20	339-362 52-74 463-483 499-517 91-105 132-146	542	MAGVNKSHEYETKTSAGEESGATETKDQTPLTPEKKKSYFEQAKDMIPAYKKTEEVPPPTEAVYPSETPLTPEKKKSYFEQAKGIIPAYKKTEDGPPSPAEAAVHPTGTPLEPEKKKSYFEQAKDMIPAYKKTEDSPPSPAEAAVHPTGSRPLEPEKKKSYFEQAKDMIPAYKKTEDSPPSPAEAAVHPTGSRPLEPEKKKSYFEQAKDIIPAYKKTEDSPPSPTEAAAHPTGSRPLEPEKKKSYFEQAKERTPGFKKSEEVSPRPAKTLPLEPEEKKGFFEQAKERTPGFKKTEEVSPRPAKAAAHLTETPLEPEEKKGFFDQAKERIPSHKKTEEVPPHPAQSASNEGAFSQTETPFEPEEKKGFLDKVKEKVP
Prunus persica	ppa005514m.g-K3	ND		457	MAHFGSTPEPTKTDEYGNPVHHTTTGTGRTDEFGNPVQHGVADTGYGTGAGYGTHTKPGVVEHHGVPAVLHSKDDQYSRDTQTTTGGYGGDGYTGGEHQEKKGLLGQLQDKLPGGNKDGQYSHDTQTTTGAYGGAYGTGGEHHEKKGIIGQVKDKLPGGQKDDQYCRDTHPTTGAYGGAGYTGGEDHEKKGIIGQVKDKLPGGQKDDQYCRDTHPTTGAYGGAGYTGGEHQEKKGIIGQVKDKLPGGQKDDQYSHDTHKTTGAYGGAGYTGDDTREKKGGQKDDHYSHDTHPTTGAYGGAGYTGDDTREKKGIIDQVKDKLPGGQKDDHYSHETHPTTGAYGGAGYTGDDTREKKG
Sarracenia purpurea	SapurV1A.0016s0910-K3	14.85 11.66 1.66 12.76 16.64 7.65	466-495 511-530 378-396 124-139 163-178 202-217	557	MAAESKSHEYETKTQAGEESGGGLFGFMGKKKEEKPYAATEYEEKIHRSDNSSPVDEVNKDEDIKPEEKKSFLEQIKGIMPAYNNTGDAPSSPAKTVTEKPLEPAEEKKGYLDQIRERMPAYKKAEDAPSSPTETVAEKPLEPAEEKKSYLDQIKERLPSYGKAEDAPSSPTETVTEKPLEPAEEKKGYLDQIKERMPAYKKAEDAPSSPTETVTEKPLEPEEKKGYLDQIKERMPTYKKAEETPSPYKKTEDASPPPVEAAVNRTETPLEPEEKKGFFEQDREGIPSNRRIDDASPYPAKAAVYDTEAPLEPEEKKGFIDRAKERIPTPKKTEEVPPPPAESAHSGYAVRNTETPLEPGDNKGFIDQTKDKI
Sarracenia purpurea	SapurV1A.2014s0030-K3	ND		214	MHIKNHFKDLKLKKRKTMAGIMQKIEETFGGKKEEQRKGESQAGLGQQGHNTQGGYGQQGQQGYNAQGEGECKEGFVDNMKDKLPGGVGGVSGGVGGVGMHKGETQGGYGQQGHNTQGAYGQQGQQGYNAQGERKEGFVDNIKDKLPGGGGVGSGGMRKGETQGAYGQQGHNTQGGYGQQGHKAQGERKEGLVDKIKHKIPGCGGGGVDGGGERKK
Solanum lycopersicum	Solyc01g065820.1-K2	ND		78	MKNILGVSEDDGQGGRRKKKGLKEKIKEKFTGGKHKNEEPHHQAHGVGTRTTTTTTEHEKKSMMEKIKEKLPGHHNHH
Theobroma cacao	Thecc1EG006526-K	9.63	91-103	164	MEGHHAEGDHNKAVETTDRGMFDFLKEDEDDRNGILPRIIIQVVYELFIYFLQSSDEEEEGEDGEKKKKKKGLKGKIKEKISGDKEAREHKDTSIPTANPEEKKGFLDKIKEKLPGQNKKPEDNASDGHPAEREPKEIGILEKIKEKIPGYHGHKTEEDKGKEN
Triticum aestivum	TaWCS120-K5	ND		391	MENQAHIAGEKKGIMEKIKEKLPGGHGDHKETAGTHGHPGTATHGAPATGGAYGQQGHAGTTGTGLHGAHAGEKKGVMENIKDKLPGGHQDHQQTGGTYGQQGHTGTATHGTPATGGTYGQQGHTGTATHGTPATGGTYGEQGHTGVTGTGTHGTGEKKGVMENIKEKLPGGHGDHQQTGGTYGQQGHTGTATHGTPAGGGTYEQHGHTGHTGMTGTGTHGTGEKKGVMENIKDKLPGGHGDHQQTGGTYGQQGHTGTATQGTPAGGGTYEQHGHTGMTGAGTHSTGEKKGVMENIKEKLPGGHSDHQQTGGAYGQQGHTGTATHGTPAGGGTYGQHGHAGVIGTETHGTTATGGTHGQHGHTGTTGTGTHGSDGIGEKKSLMDKIKDKLPGQH

YK-Type

Specie	Access number/Name	PEST score	Position	Protein size	Sequence
Ammopiptanthus mongolicus	ABH01188.1	ND		183	MAHIQSGYGDQDRKTIDEYGNPVRQTDQHGNPVNPTTGTGAGYGESGGTGYGGPTGDTAGYGSTGYGTTPGDKAGYGTTTGGDGTTTGYGSGGGTGHGTTTGGTTGTTEYGSGGGTTGTTGYGSGGGHEHQHQHHGREKEEHGHEFASHGAPGGYEAASGEQQYEKKGIMNKIKEKLPGHRDV
Ammopiptanthus nanus	ADF43064.1	ND		181	MAHIQSGYGDQDRKTTDEYGNPVRQTDQHGNPVNPTTGTGAGYGESGGTGYGGTTGDTAGYGSTGYGTTPGDKAGYGTTTGGDGTTTGYGSGGGTGHGTTTGGTTGTTEYGSGGGTIGTTGYGSGGGQNQHQHHGREKEEHGHEFASHGAPGGYEAASGEQQYEKKGIMNKIKEKLPGHRDV
Arabidopsis halleri	Araha.12619s0007-YK	2.04 6.13	84-102 112-130	150	MADLKDERGNPIYLTDEHGKPAQLMDEFGNPMHLTGVATTVPHLKESSYTGPHPITAPVTTTNTPHHAQPISVSHDPLQDHDLRWFGTNLPEEDWEDGEARSKTTEETKSKPSAATETGTSGSGIQEPHEKKGFFKKIKEKLSGHRNLM
Arabidopsis lyrata	327864-Y4K	2.04	84-102	161	MADLKDERGNPIYLTDEHGKPAQLMDEFGNAMHLKGVATTVPHLKESSYTGPHPITAPVTTTNTPHHAQPISVSHDPLQDHDLRWFGTNLPEEDWEDGEARSKTTEETKSKLGVNNPSAATVTGTGTGSGSGSGIQEPHEKKGFFKKIKEKLSGHRNLM
Arabidopsis thaliana	AT4G39130-Y2K	ND		151	MADLKDERGNPIYLTDEHGKPAQLMDEFGNAMHLKGVATTVPHLKESSYTGPHPITAPVTTTNTPHHAQPISVSHDPLQDHDLRWFGTNLPEEDWEDGEARSKTTEETKSKLGVNNPSAATVTGTGTGSGSGSIQEPHEKKGFFKKIKEKLSGHRNLM
Capsella grandiflora	Cagra.0926s0062-YK6	ND		204	MDSYQNQSGVQKKGMTEKIMEKLPGHHAPHQTGASTGYGATTGGVHHEKKGMTEKIMEKLPGHAPHQTGANTAYGATTGGVHHENKGMTEKVMEQLPGHHGSHQTGYGNTGGVHHHEKKGMTEKIMEKLPGHQGTNTGYGGATNTGVVHHEKKGIAEKIKEKIPGHHGTGTTTSYGNTGGVHHHEKKSTMDKIKEKLPGSH
Capsella rubella	Carubv10018039m.g-YK6	ND		204	MDSYQNQSGVQKKGMTEKIMEKLPGHHAPRQTGASTGYGATTGGVHHEKKGMTEKIMEKLPGHAPHQTGANTAYGATTGGVHHENKGMTEKVMEQLPGHHGSHQTGYGNTGGVHHHEKKGMTEKIMEKLPGNQGTNTGYGGATNTGVVHHEKKGIAEKIKEKIPGHHGTGTTTSYGNTGGVHHHEKKSTMDKIKEKLPGSH
Cicer pinnatifidum	AAN77521.1	ND		195	MSQYNQGQYVDQTRTVDEYGNPIVQVDQYGNPINQSGVGMTGEAGRTFENPGLTGHDNSKSHTTSYGTHTGSGGGTGDGYGTYNTRGGDGDTYNTRGGSGMTGEVGKIFGTTDDTGNHHGVDQTTTDYGTHNTGSYGTHTGGYGNTNTGSGYGNTKVGQEFGREEPRHHGGEQQHGEKKGIMDKIKEKLPGTGH
Cichorium intybus	ACF15449.1	ND		261	MAQYGGDQQYGREGRQTDEYGNPIRKTDEYGNPLHSTTGGTMGDYGTTGHHQGVGHATGVQELIQKPAAVTVPPVRGWVPNIGHAAGVTGTGYGTGHQGLGTGGTGTDYKTSGGHGTGHHGIGTEGHYGTGADTESYQNQPSATPFGGGGIGTGTGAYEGLGVAGQKPSATPFAGSDTGTGTGAGYDRHGGEGYEKKGMMEKIKEKLPGGHSTDEHQRVSTTAGGVGGGGYGEGGQTHEKKGVMEKIKEKLPGHH
Galega orientalis	ADT80777.1	ND		280	MSQYNQGQYGQQTRKTDEYGNPVVQVDQYGNPIGGMTDTSTGHQQQHHGLDQGTGYGTHIGKGTGYGTHTDIITGTGYESHTGSHGTGYGTQTGTGYGTHGTGEYGSTNAGSGFGNTNLDGTGTGYGTTGYGAGTGGTSGIRHGDYQHGEEKGIMDKIKEKIPGTGNTNTGSGYGTTGTGYGTTGGYGTGSTGVRHGDHQHHGEDKGIMDKIKEKIPGTGNTNTGSGYGTTGYGGTGSTGVGQEYVREERHHHGDQQQHGEKKGIMDKIKEKLPGTGSCTGH
Glycine max	Glyma.09G185500-Y2K	ND		253	MLACIFHHPTSHTTTTSTSLQSKPTTTMASYQKHYDDQGRKVDEYGNVEKQTDEYGNPVHAASVTYVATRTAAGGYSDDINKQHDTTNAYGVDTGRQHSSGGYDGDTNKHHGTTGGYNDDTNRHHGTTGVYGIDTDRQQHGTTGGYAGDTGRQHGNIGGPYYGTNTADTGTGPRSGTTGGTYGGTGGTGGTDYGTTGGTYGYGSGTYGVGVNTGGAHTEAGYRKEHRQHDQSHGDQNEKKGIMDKIKEKLPGGHSDK
Glycine max	Glyma.07G090400-Y2K	ND		243	MASYQKHYDDQGRKVDEYGNVERQTDEYGNPVHATSVTYVATKSVGGYNDDTNKQHDTTGVYPEKDTGRHHFGRGYDGDTNKQQHDAIGVYPGIDIGRDHETTGVYGLNTDRHHGTTGVNPGIDTHNQGHTGGYAGDTGRQHGNTGGLYYGTDTADTGTGPRSGNTGGTYGGTGGTDYGTAGGTYGYGSGTYGVGINTGGAHTEAGYGKEHRQHEQSHGGQHEKKGILDKIKEKLPGGHSDK
Malus domestica	MdDHN5-YK4	ND		256	MAHYQNQHGATPQETDQFGNPIQHGTTGATGFGTATTGYGTTNDTYTGGQQQQKRGMMDKIKDKIPGTGGARRADDHYSSHAHTGIGTTGTGYGTTAAPSTGGEYERGLMDKIKDKIPGTGGRTDHPTPYGGTYTGEHQHEGIADKIKDKIPGTGHRDDAYSSHTTSTTAPYGGTTGQHHSTTGQHHSSTTAPYGGTTGQHHSTTGQHHSTTAPYGGTTGQHHSTTPYGGTTGQHHEKKGIMDKIKEKLPGGHH
Malus domestica	MdDHN6-YK3	4.70 7.78 0.84	11-55 98-133 156-171	190	MANYQSQYGTKPQDTDEYGNPIQQGTTGGFGSATTGTGYGTTETPYTGGQQQQERGTGMTGSGYGTTDAPYTGGQQQQERGMMDKIKDKIPGTGGGRRDDDPYSSNAQTGTGMTGTGYGTTDAPYTGGEYEERGMMDKVKDKIPGTGQRDETYSSKTASTTAPYGGTTGEHQEKKGAMDKIKEKLPGGRH
Medicago falcata	ABX80061.1	ND		307	MSQYQQGGDQTGRVDEYGNPLSQGQVDQYGNPISGGGMTGATGHGHHQQHHGVDTGYGAHTGSGGAPTGGGYGGNDIDGTGYGTGTGTGYGATGGGTGHDNRGVVDKIKEKIPGTGTGTGTGTGRGTTGYGDTGVGQGTTGVGHQQHGENRGVVDKIKEKIPGTGTGTGTGTGHGTTGYGATRTGTGHGTTGYGATDVGHGTTGVGHQQHGDNRGAVDKIKEKIPGTEQNIYGTGTGTGTGTGHGTGTGHGTGHGTTGYGSTGQEYGKEGHHGHDEQHLGEKKGIMEKIKEKIPGTGSCTGHGQTKP
Medicago sativa	*AAL15651.1*	ND		330	MSQYQQGGDQTGRVDEYGNPLSQGQVDQYGNPISGGGMTGATGHGHHQQHHGVDTGYGAHTGSGGAHTGGVGGYGGTDIDGTGYGYGTGTGTGTGTGYGATGGGTGHDNRGVVDKIKEKIPGTGTGHGTTGVGHQQHGDTYGTGTGTGYGTTGVGHQQHGDTYGTGTGTGNWNWNEVGHGTTGYGATDVGHGQHQQHGENRGVVDKIKEKISGTGTGTGTGTGHGTTGYGAGGVGHGHQQHGEKGVVDKIKEKIPGTEQNTYGTGTGTGTGHGTTGYGSTGQEYGREGHHGHDEQHLGEKKGIMEKIKEKGEAVLVLDHVLDMDKLNHNIYGCMHLI
Medicago truncatula	Medtr6g084640-Y2K3	ND		312	MSQYQQGYGDQTRRVDEYGNPLTSQGQVDQYGNPISGGGMTGATGHGHGHHQQHHGVGVDQTTGFGSNTGTGTGYGTHTGSGGHTTGHGVGGYGTTTEYGSTNTGSGYGNTDIGGTGYGTGTGTGYGATGGGTGVGYGGTGHDNRGVMDKIKEKIPGTDQNASTYGTGTGYGTTGIGHQQHGGDNRGVMDKIKEKIPGTGTDQNQYTHGTGTGTGTGYGTTGVGHGTTGYGGASGVGHQQHGEKGVMDKIKEKIPGTEQNTYGTGTGTGTGHGTTGYGSTGYGTHGTTGYGDEQHHGEKKGIMEKIKEKLPGTGSCTGHGQGH
Phaseolus vulgaris	Phvul.004G158800-YK	ND		259	MASYQKQYEDEQGRKIDEYGNVVKTTDEFGNPVHSTSVTYIATTGTGRVTDDTNKQHDTSNTSNLYGVNTARQHGTTGGFTGDTGRQHGTTGGFTGDTGRQHGTTGGFTGDTGREHGTTGGFTGDTGRQHGTTGGFTGDTGRQHGTTGGFTGDTGRNHKTTGGFTGDTGRQHGTTGGFTGDTGRQHGTTGGFAGDTAVGGGPYVGDNTADTGTGPRSGTGGGYGSGTGAGYGREHGNEEKKGIMDKIKEKIPGVHSDNK
Physcomitrella patens	PpDHN Y11K	4.30	514-540	554	MNQYGREQQDTGLVGSGTGHRDEYGNPRQEGIMDKVKNAVGMGPSSGTGYNNQPGYDNYGNPRQEGLVDKAKDAVGMGPSLGTGYNNQPGYDSYGNREGIVDRAKDAVGMGPNSGTGYNNQPGYDNYGDRRHEGLADRAKDAVGMGPNSGYNHQPGYDNYGNREGVVDKAKDAVGMGPNSGTGYNNQPGYDSYGTRRQEGLVDRAKDAVGMGPNSGTGYNNQPGYDNYGNPRREGVVDRAKDAVGMGPNSGTGYNNQPGYDNYGNREGIVDKAKDAVGVGPHSGTGYHNQPSYDNYGNPRQEGIVDRAKDAVGMGPNSGTGYNNQSDYDSYGNPRHEGMLDKAKDDF
Pisum avestivum	AAB51380.1	ND		225	MSQYQNQYGAQTRKTDEYGNPVNQVDQYGNPISGGGGLTGEAGRQHYGTTGGATDHGHGHGQQHRGVDQTTGYGTHTGGVGGYGTKPEYGSTNTGSGYGTGTGYGGSGTTTEYVREEHHGHDKKGVMDKIKEKIPGTEQSRTNTDGTGYGSTGYGASGGGIGNTGQEYVREERHVHPGDKKHGSAGQEYVREEHHVHPGDKKHGSAGQEYVKEERRGIGNTGQEYVREEHRVDHGEKKGIMDKIKEKLPGTGGCTGH
Pisum avestivum	*P28641.1*	1.6	86-138	232	MSQYQNQYGAQTGMTDEYGNPVNQVDQYGNPISGGGGLTGEAGRQHYGTTGGATGHGQHGHGQQHRGVDQTTGYGTHTGGVGGYGTKPEYGSTNTGSGYGTGTGYGGSGTNPDYGSTNTGSGYGTGTGYGGSGTTTEYVREEHHGDKKGVMDKIKEKIPGTEQSRTNTDGTGYGSTGQGYVREQQHGTGYGSTGQGYVREQQDVHHGDEQHGEKKGIMEKIKEKLPGTGACTGH
Prunus dulcis	AAY98416.1	ND		272	MAHFGSTPEPTKTDEYGNPVHHTTTGTGRTDEFGNPVQHGVADTGYGTGAGYATHTKPGVVEHHGVPAVLHSKDDQYSRDTQTTTGGYGGDGYTGGEHQEKKGLLGQLQDKLPGGNQDGQYSHDTQTTTGAYGGAYGTGGEHPEKKGIIGQVKDKLPGGQKDDECYRDTHPTTGAYGGTGYTGGEHHEKKGVIGQVKDKLPGGQKDDQYCRDTHPTTGAYGGAGYTGGEHQEKKGIIGQVKDKLPGGEKXDQYSHDXHKTTGAYGGAGYTEM
Prunus persica	*XP_007202596.2*	ND		457	MAHFGSTPEPTKTDEYGNPVHHTTTGTGRTDEFGNPVQHGVADTGYGTGAGYGTHTKPGVVEHHGVPAVLHSKDDQYSRDTQTTTGGYGGDGYTGGEHQEKKGLLGQLQDKLPGGNKDGQYSHDTQTTTGAYGGAYGTGGEHHEKKGIIGQVKDKLPGGQKDDQYCRDTHPTTGAYGGAGYTGGEDHEKKGIIGQVKDKLPGGQKDDQYSHDTHKTTGAYGGAGYTGDDTREKKGGQKDDHYSHDTHPTTGAYGGAGYTGDDTREKKGIIDQVKDKLPGGQKDDHYSHETHPTTGAYGGAGYTGDDTREKKG
Prunus persica	ppa009997m.g-YK2	0.69 7.88 11.97 1.36	1-51 208-249 176-208 126-145	268	MANYQNQYGATAQSTNDYGNPLTNYTGSEPQSTNEYGATDEYGNPVTTYTRSEPHYTDEYGNPVRERGMMDKIKEKLPGTHDPYSSHSQTTYPTARYGETGYTGLEQHHGMMNKMPGTDPYSSHSHTTGTTAPYDGTGYTGTEYRQHKGTMDRIKDKLTGTGGHRVDDPYSSHSHKTATTTPYGGTTTAYGDSTTTPSPYGGTTTHSPYGGTTTTAYGDTTTTPSAYGGTTTTPSAYGGTATTTYPREKKGIMDKIKEKLPGGHHY
Pyrus pyrifolia	ACK37880.1	7.78 9.82	93-128 148-165	184	MANYQTKYGTTPQDIDEYGNPIQQGTTGGLGGATTGYAYGATGGQQQQERGTGMTGSGYGTTDAPYTGGQQQERGMMDKIKEKIPGTGGGRRDDDPYSSNAQTGTGMTGTGYGTTDAPYTGGEYEERGMMDKVKDKMPGTGQRDETHSSQTTTTTPYGGTTGEHQEKKGAMDKIKEKLPGYRH
Sarracenia purpurea	SapurV1A.2659s0010-YK10	ND		556	MAGIMQKIEETFGGKKEEQRKGEPQPGLGQQGHNTQDEYGQQGYNAQGEHKEGFAGNIKDKIPGGGGVGSGGMHKGETQGGYVQQGYNTQGGYGQQKYNVEGEHKEGIIDKIKDKISGGGGGMHKGETQGGYGQQEHNAQGEHKEVFVVNVKDKIPGGGSVGGGGIHKGETQGGYGQQGYNAQGEHKEGIVDNIKDKIPGGGGSGHDGVGGLGDGDGGGGGMHTGETQGGYMQQGQNTQGGYGQQGYNTQDECKEGFVDNIKDKIPGGVGGGVGGGGMHKGETQGRYGQQGHNTQGGYGQQRYNAPGERKEGFVDNIKDKIPGSGGGNVGGGGMHK
Sarracenia purpurea	SapurV1A.5492s0010-YK3	10.21 0.92	90-113 6-19	175	MASTIRDEQGNPIQLTDEHGSPVHLTDEHGDSVQIIGIATTKQPPTSFRYGSSDQVTGTGLWSSTAKSEDAMKGTDIHETGQRFRGGHKKEQTEISSTSILGSPEDDGQGGRKGLKQKIKEKLTGGKHGEEHEHTVEVDTTTTARPAGEHYQEHQKKGVVEKIKEKLPGHHGHH
Vicia monantha	BAH70483.1	ND		195	MSQYQNQYGAAQTGMTDEYGNPVNQLDQYGNPVSGGGFTGEAGRQHFGTTGAAGHGHGQQHRGDDQTTGYGTNTGGVGGYGTKPEYGSTNTGSGYGTGTGYGGTGTTEYVREEHHGDKKGVMDKIKEKIPGTEQSRTNTEGAGYGTTGYGASGGGMGNTGQEYVREERHVDHGEKKGIMDKIKEKLPGTGGCTGH

KS-Type

Specie	Access number/Name	PEST score	Position	Protein size	Sequence
Aquilegia coerulea	Aquca_004_00603-KS	ND	93		MAGIMNKIGDALHIGGNKEEQKQGEAHKTEIKHGETAHKPEQKEGFVDKIKDKITGQGPHKTEGGGEKKKKKEKKKKEGDHGHDGSSSSSDSD
Arabidopsis lyrata	AL1G64750	ND	98		MAGLINKIGDALHIGGGNKEGEHKKEEEHKKHVDEHKSGEHKEGIVDKLKDKIHGGEGKSHDGEGKSHDGEKKKKKDKKEKKHHDDGHHSSSSDSDSD
Arabidopsis thaliana	AT1G54410-KS	ND	98		MAGLINKIGDALHIGGGNKEGEHKKEEEHKKHVDEHKSGEHKEGIVDKIKDKIHGGEGKSHDGEGKSHDGEKKKKKDKKEKKHHDDGHHSSSSDSDSD
Boechera stricta	Bostr.13404s0009	ND	99		MAGLINKIGDALHIGGGNKEGEHKKHEEEHKKHVDEHKSGEHKEGIVDKIKDQIHGGEGKSHDKEGKSHDGEKKKKKDKKEKKHHDDGHHSSSSDSDSD
Brachypodium distachyon	Bradi1g13330-KS	ND	100		MAGIIHKIEEKLHMGGGSDHKDEHKKEEEHKKKDGEHKKDGEHKEGMMEKIKDKITGEHGDGDKSSGDHKEKKDKKKKKEKKHGEGHKKEDGHSSSSDSD
Brassica oleracea var. capitata	Bol042507	ND	95		MAGIINKIGDALHIGGGNKEDEHKKEEHKKHADEHKSGEHKEGIVDKIKDKIQGGEGHSSGDHKHDGEKKKKKDKKEKKHHHDGHHSSSSDSDSD
Brassica rapa	Brara.C04012	ND	95		MAGIINKIGDALHIGGGHKEDEHKKEEHKKHADEHKSGEHKEGIVDKIKDKIHGGEGHSSGDHKHDGEKKKKKDKKEKKHHDDGHHSSSSDSDSD
Capsella grandiflora	Cagra.27207s0001	ND	100		MAGLINKIGDALHIGGGNKEGEHKKHEEEHKKHVDEHKSGEHKEGIVDKIKDKIHGGEGKSHDGHEGKSHDGEKKKKKDKKEKKHHGDGHHSSSSDSDSD
Capsella rubella	Carubv10021201m.g	ND	100		MAGLINKIGDALHIGGGNKEGEHKKHEEEHKKHVDEHKSGEHKEGIVDKIKDKIHGGEGKSHDGHEGKSHDGEKKKKKDKKEKKHHGDGHHSSSDSDSD
Carica papaya	evm.model.supercontig_161.14-KS	ND	93		MSGIMHKIEDALHIGGRKKEEEHKGEHHGEHKGEHKGEHHGEHKGEHKEGIVDKIKDKIHGEGHEEKKKKKKEKKHGEHGHDGHSSSSDSDSD
Daucus carota	DCAR_013481	ND	90		MSNIIHKVEEKLGLGGDHKDGKHHDDHKKSEHKEGIVDKVKDKVHGDKSGDHHGHGHGHGHGDGKKKDKKKKKHEDGHKHGDSSSGSDSD
Glycine max	Glyma.16G037900-KS	ND	112		MSGIIHKIEETLHVGGHKKEEEHKGEQHHGGEYKGEHHGEHSTEYKGEHHVGEHKPEHHGGEEHKEGFLDKIKDKIHGEEGGATAEGEKKKKKKEKKKHEHGHDSSSSSDSD
Kalanchoe fedtschenkoi	Kaladp0098s0091	ND	87		MSGIINKIGDALHIGGDKKAEEHHKPEDHHKADGHKEGVVEKIKDKIHGEKSGEHHEGEKKKKEKKKKKEGEKKHHGGDSSSDSDSD
Kalanchoe fedtschenkoi	Kaladp0911s0009	ND	107		MSGIMNKIGDALHIGGDKKAEEHHKAEEHHKADEHHKADEHHKAEEGHKSGEHKEGLLDKIKDKIHGDGEKSGEHHEGEKKKKEKKKKKEGEKKHDGGDS
Linum usitatissimum	Lus10020271-KS	ND	93		MSGIIHKIEETLHIGGGDDHKDKDKDKHHGHGGDHKHSSGDHKEGIVDKMKDKIHGEDHHDHHGHDGEKKKKKKEKKKHEDGHESSSGSDSD
Manihot esculenta	cassava4.1_019934m.g-K2S	ND	102		MSGIIHKIEETLHIGGNKKEEHKGESHGHGDHKDHKDHKDHKGDHHKGEGEHKEGIVDKIKDKIHGDHEHGDGDKKKKKKEKKKHEHGHDHDGHSSSSSDSD
Medicago truncatula	Medtr7g086340-K2S	ND	121		MAGIMNKIGDALHIGGDKKEGEHKGEQHGHVGGEHHGEYKGEQHGFVGGHGGEHKGEQHGFGHGDHKEGHHGEEHKEGFVDKIKDKIHGEGADGEKKKKKEKKKKHGEHEHGHDSSSSDSD
Medicago truncatula	Medtr6g027810-K2S	ND	100		MAGIINKIGEALHVGGGHKKEDEHKGEKSHDDKHKGEKSHDDKHKGEHKEGIVDKIKDKIHGGDGEGHEHKGEKKDKKKKDKKKKEHGHDHDSSSSSDSD
Mimulus guttatus	Migut.J00768-K2S	ND	119		MAGIIHKIEEKLGLGGGHKEEEKKAEHSYAEQIKPDHHGEKKAEHGYGGGEKKPEEHKEGLIEKIKDKIHGGDEGESGECKGEKKDKKKKDKEKKKKHCDGDGEDKHGGSSSDSGSDSD
Oryza sativa	OsLIP5-KS	ND	92		MAGIIHKIEEKLHMGGGEHKKEDEHKKEGEHHKKDGEHKEGVVEKIKDKITGDHGDGGEHKEKKDKKKKKEKKHGEEGYHHDGHSSSSSDSD
Oryza sativa	OsWS1724-KS	ND	92		MAGIIHKIEEKLHMGGGEHKKEDEHKKEGEHHKKDGEHKEGVVEKIKDKITGDHGDGGEHKEKKDKKKKKEKKHGEEGHHHDGHSSSSSDSD
Panicum virgatum	Pavir.Ia01114-KS	ND	101		MSGIIHKIEETLHMGGDHKKEEEHKKAEAHKKAEEHHKKDGEHKEGIVEKIKDKITGEHGDKSGEHKDDKDHKEKKDKKKKKEKKHGEGHHDGHSSSSDSD
Populus trichocarpa	PtrDHN-6-KS	ND	189		MAGIMHKIEETLNIGGKKDERKGETQGGYNQQDHRDGAQGQRKEGFVDQMKDKIPGGGGGVHKGETQGGYNHQEQGGYNQQQHRGGAQGERKEGFVAQMKDKLPGGGGGMTQGGYNQQEHRGGAQGGYNQQEHRGDAQGERKEGFVDKIKGKIPGGGGGSGVRGEGGEKKKKKDKKKNEDGHSSSSDSD
Populus trichocarpa	PtrDHN-10-KS	ND	108		MASCQCSKPVEHPCNQDQKSHSSGQKVEKQAEGGVVKTGTRSSSQSHSPGSTNGMTPAPACNANKRGERKKGLFQRIKDGISGHSDGGGSSSSSESESDDEKCGKRKN
Populus trichocarpa	Potri.013G062400-KS3	ND	239		MNEDLRDLFLILNVAARGSFHGAYKCGTRFIHHFISKAISKREKRRKKYTMAGIMHKIEETLNIGGKKDERKGETQGGYNQQDHRDGAQGQRKEGFVDQMKDKLPGGGGGMTQGGYNQQEHRGGAQGGYNQQEHRGDAQGERKEGFVDKIKGKIPGGGGGSGVREGGEKKKKKDKKKNEDGHSSSSDSD
Ricinus communis	30072.t000037-KS	ND	96		MAGIMHKIEETLHIGGHKKEEHKGESHDQHKHDQHAHGDHPKPEGEHKEGFMDKIKDKIHGDEKGHEHGHGESGEKKKKKKEKKKHEHGHSSSSDSD
Sorghum bicolor	Sobic.001G149500	ND	101		MSGIIHKIEETLHMGGDHKKDDEHKKEEHKKAEEHHKKDGEHKEGIVEKIKDKITGEHGEKSGEHKDKDHKEKKDKKKKKEKKHGEGHDHDGHSSSSSDSD
Trifolium pratense	Tp57577_TGAC_v2_gene29874	ND	100		MSGIINKIGETLHIGGGHKKEDEHKGEKSHDDKHKGEKSHDDKNKGEHKEGIVEKIKDKIHGGEDHESKGKGEKKDKKKKDKKKKEHGHDHDSSSSSDSD
Zea mays	Zm00008a004788	ND	103		MSGIIHKIEEKLHMGGDHKNKEEEHHKKAEEHHKKEEGEHHKKDGGEHKEGIVEKIKDKITGEHGDKSGDHKEKKDKKKKDKKKHGEGHDHDGGHSSSSSDSD
Zea mays	GRMZM2G169372-KS	ND	209		MPLTMMIPCRRLLETDAMLRRAGRKKRKVGCFACTSSWHAEQLVHYLLFSAITSFLSDWPSIPSINTGRRRRANQDHRRVAQSIIAVSLLREQRKRARRAVAMSGIIHKIEEKLHMGGDHKNKEEEHHKKAEEHHKKEEGEHHKKDGGEHKEGIVEKIKDKITGEHGDKSGDHKEKKDKKKKKKHGEGHDHDGGHSSSSSDSD
Zea mays	GRMZM2G448511-KS	ND	108		MSGIIDKIQETLHIGGDHKEEHEHKKGEEHHKKDDGEHHKKDDGEHKEGIVEKIKDKITGEHGDKSGDHKDKDHKEKKDKKKKKEKKHGEGHDHGDGDGHSSSSSDSD