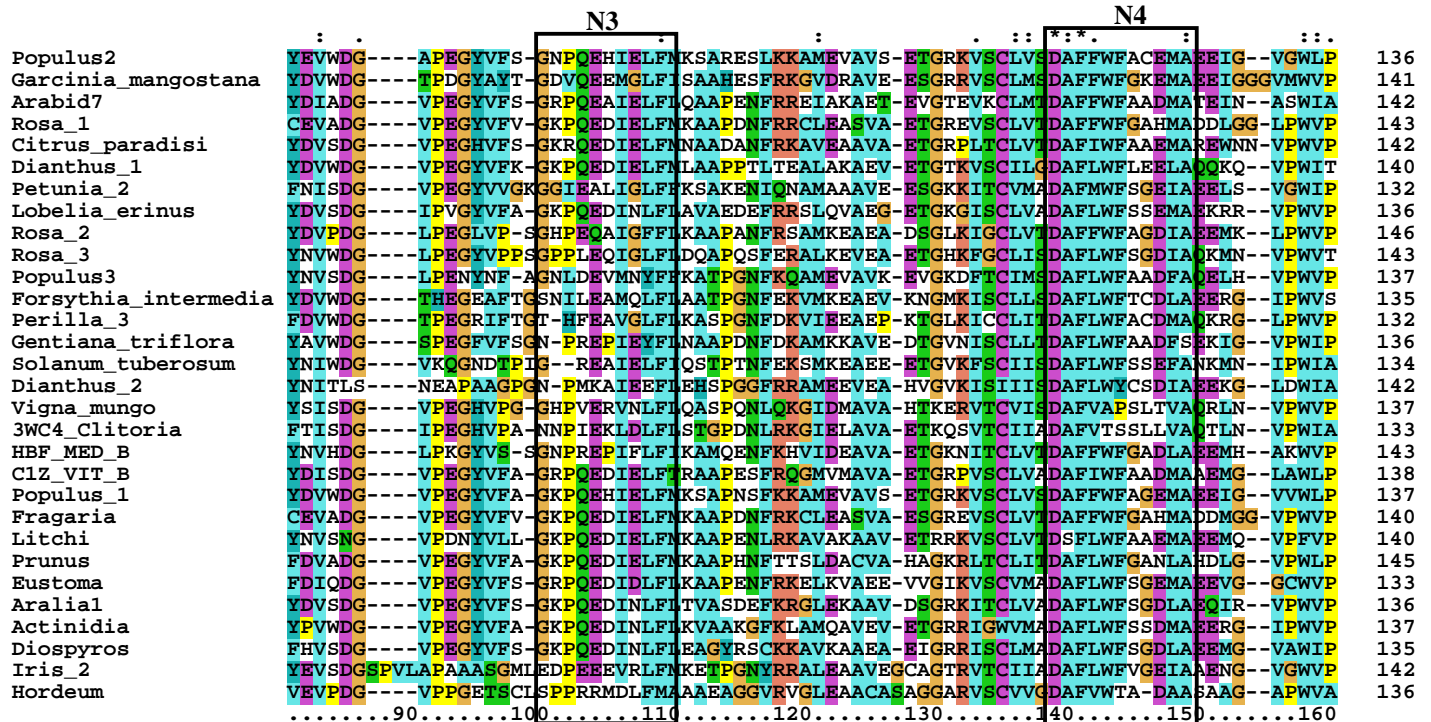
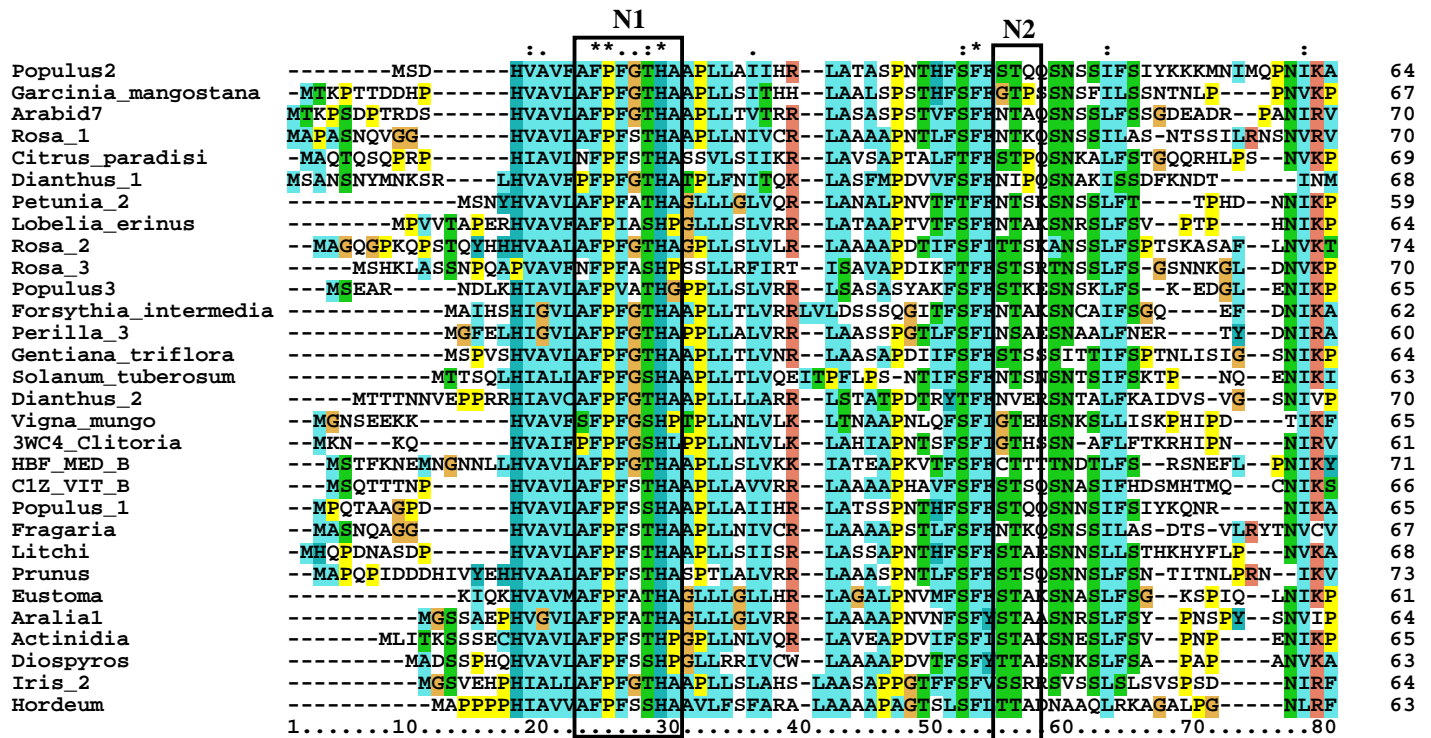


Figure S1 Multiple sequence alignment of 30 F3GT protein sequences. The regions involved in acceptor binding are enclosed in rectangular boxes



	N5	N6	
Populus2	HWTAGPNSLSAHVYTDLIRETFDGGMVGRE	---KTIISLIQGMSS-KIRICDLPKGVLF	--GNTESFFNMLHKMGKALP 210
Garcinia_mangostana	HWTAGPHALSSSLHYTDFIRESFA-GDVTQRED	---ELLSSIPGMS-RVRVCDLPKGVVF	--GRLDSLFQMLHKMGKQALP 214
Arabid7	HWTAGANLSLAHLYTDLIRETIGVKEVGERME	---ETIGVISGME-KIRVKDTPKGVVF	--GNLDSVFKMLHQMGLALP 216
Rosa_1	HWTAGPASLSAHVHTDLIRNTTSMGGHDGKE	---TITAVTAGMS-KVRPQDLPKGIIF	--GKLDLSFRMLHQMGLMLP 216
Citrus_paradisi	QWPAGPNSLSAHLYTDIIRDKIGTQ-SQNQDQ	---QLIHFIIPGMN-KIRVADLPKGVVS	--GDLDLSFVMLHQMGRQLP 215
Dianthus_1	YVMSEHSLLAHICTDLIRQTIIGIHEKAERKD	---EELDFIPGLES-KIRVQDLPKGVIM	--GNLDSYFARMLHQMGRALP 215
Petunia_2	IWTSAGSLSVHYTDLIRENVEAQGIAGRED	---EILTFIPGFA-ELRLGSLPSGVVS	--GDLESPPFVMLHKMGKTIG 206
Lobelia_erinus	IWTSAGSLSIHFYTDLIRQTVGLNGIEGRKD	---EMLDFIPGFS-AVRLGDLPGGVLS	--GNLESPPFIMLYKMGQCLT 210
Rosa_2	IWTAGPRSLLVHAATDLIRQV--LG---TDE	---KTLEFLPGFS-KLEVADLPKGVVS	--GNLESPISELLHKMGQQLP 215
Rosa_3	IWS-GPRPLLVLHLETDMIREKVGAPG--QED	---KTLDFLPGFS-NEFLASDLPKGVVF	--GNIESPLANMLYKMGQKLP 214
Populus3	IWTSSSRSLLLVLETDLVHKMRSIIN-EPED	---RTIDILPGFS-ELRGS DIPKELFH	--DVKESQFAAMLCKIGLALP 210
Forsythia_intermedia	HWTAAASCSLSAHMYTDQIWSLMRSTGTAKTEE	---KTLFSVPGMT-SVRFS DLPREILS	--DNLESPLIMLYKMQVQKLS 209
Perilla_3	HWTAAASCSLSHLYTDQIV---KAGTAN-QE	---QNLFSFIPGLE-MATLTDLPKGVVF	--DNLSPFLAINKMVKELP 201
Gentiana_triflora	VWTAASCSLCLHYTDEIRSRFAEFDIAEKAE	---KTIDFIPGLES-AISFSDLPBELIM	--EDSOSIFALMLHNMGLKLIH 210
Solanum_tuberosum	HWTAGCSLSIHLHYTDLIRN-----ND	---ETLLKIPGFS-STLKMSDMPREIVA	--ESLNGPMSMLYNMALNLH 199
Dianthus_2	IWTAGPNSLSAHLYTDLIREKTGSKG--VHDV	---DVLVSPGLS-NVRISDLEPGLVS	--GILDAPFQMLHKMGLELPL 216
Vigna_mungo	VWPPLSCSLSAHFYTELIRQTCNSAAGDTPLD	-----FVPGLES-KMRVEDLPKDVIOGAGEE	TLFRTLASLGSVLP 209
3WC4_Clitorea	HWPNVSCSLSLYFNIDLRDKCKDAKNATLD	-----FLPGLS-KLRVEDVPQDMLD	-VGEKETLFRMLNSLGVVLP 204
HBF_MED_B	IWTAGPHSLTHVYTDLIREKTGSKG--VHDV	---KSIDVLPGFP-ELKASDLPKGVIK	--DIDVFATMLHKMGLELPL 214
C1Z_VIT_B	HWTAGPNSLSHVVYIDEIREKIGVSGIQGRE	---ELLNFIIPGMS-KVRFRDLQKGVIF	--GNLNSLFRMLHRMGQVLP 212
Populus_1	HWTAGPNSLSAHVYTDLIRDTFVGGVAGHED	---ELLSLIPGMS-KIRIRDLKPVGLF	--GNLEAVFNMLHKMGKRALP 211
Fragaria	IWTAGPASLSAHVHTDLIRNTTSGDCHDEKE	---TIT-VIAGMS-KVRPQDLPKGIIF	--GNLESFVFRMLHQMGLMLP 212
Litchi	QWLSGSSSLSTHFYTDVIREKMGLEGIEGRE	---EQLKFIQGMSS-KVCIRDLPKGVLF	--GNLOSIFDMLHRMGQLPL 214
Prunus	IWLSGLNLSLHYTDLIRHTIGTQSIAGRENELI	TKNVNIPGMS-KVRIKDLKPVGVIF	--GNLDSVFRMLHQMGLQLP 222
Eustoma	VWTSAGSLSVHYTELIRETIGLVAGRED	---EILKFIIPGFS-ELRLGDLPSGVVF	--GNLESPPFVMLHKMGQTLS 207
Aralial	IWTSAGSLSIHFYTDLIRQTVGLGGIEGRMD	---EILTFIPGFS-ELRLGDLPGGVLF	--GNLESPPFIMLYKMGKQTLPL 210
Actinidia	IWMSGASLSHLYTDLIRETVGFSGISGRON	---ELLKFIIPGFS-ELRLGDLPSGVLF	--GNLKSPPFIMLYKMGKQALP 211
Diospyros	VWTSGVCFSVHYTDLIRDTVGINALAGRED	---EIVKFIIPGFSGGVRLGDLPSGVLF	--GNLDSYFVMLHKMGKVLQ 210
Iris_2	IWTGGPCSFQAHLYTDLIRDRIGVGEKADLDA	---DLQFIPGLA-SLRVRDLPKGVVF	--GHLDGAFATMLYRMATELPL 215
Hordeum	VWTAASCALLAHRTDALRRDVGQAASRADE	---LLVAHAGLG-GYRVRDLPKGVVS	--GDFNYVILLVHRQARQLP 209



Populus2	QAA-AVFINSFEELDP-GI IKDLKSRFK-KFLNIGP	SHLILS---PPP	MEDTY-----GCMTWLDKQ--KL-AS-VAY 273
Garcinia_mangostana	KAD-AVFINSFEELDP-TFTNDLKSCLK-CCLNIGP	FNLISSP--PAQV	PDY-----GCIPWLDKQ--QL-AS-VAY 277
Arabid7	RAT-AVFINSFEELDP-TLTNNLRSRFRK-RYLNIGP	LGLLSSTLQQLVQDPH	-----GCLAWMEKR--SS-GS-VAY 281
Rosa_1	KAT-AVFINSFEELDP-VITNDLKSFK-RYLVNVP	FDLLESAPAAATTLQNGDVVVVGDGVV	GDGCLSWLDDK--KA-AS-VVY 289
Citrus_paradisi	KAA-AVFINSFEELDP-ELTNHLKTKFNKFLSV	GPFKLLLASDQQPSSATDLD	---DEYGCLAWLDDKQK--AS-VAY 288
Dianthus_1	RAS-AVICISSQELDP-VATNELNRLN-KLINVGP	PLSLIQSNLSFSGTNK	-----SLGWLDKQ--ES-ENS-VAY 280
Petunia_2	KAT-ALPVNSFEELDP-PIVEDLKSFK-FNNFLN	VGPFNLITPPPSANI	-----TDEYGCIAWLDKQ--PGSVAY 271
Lobelia_erinus	KAT-AIPINSFQEMDP-EINKDLNKH-FSNFLN	IGPFNLISPTPLN	-----TDEFACIPWLDKHL--PQSVAY 274
Rosa_2	KAA-AVAINSFEELDP-DVVNELKSR-FRKLNV	GPFNLTSPSPPLKDDSS	-----GCLWLDKHK--PASVVY 279
Rosa_3	QAT-AVAVNSFTMDL-KVSEELKRR-LKKLLLV	GPHLVRVPSAQSDDE	-----EKKDACPWLDNKH--PASVAY 283
Populus3	QAA-VVASNSFEELDP-DAVILFKSR-LPKFLN	IGPFVLTSPDPFMSDPH	-----GCLWLDKQ--QESVVY 273
Forsythia_intermedia	KST-AIVVNSFEELDP-VITNDLKSFK-FQNFN	IGPILSPT--LSNGD	-----SGQECLLWLEKOR--HASVIY 273
Perilla_3	KST-AVVLNSFEELDP-IITDDLKTK-FKNFLN	VGPFILASPP--QATPD	-----DETGCLSWLADT--SPKVVY 266
Gentiana_triflora	KAT-AVAVNSFEELDP-IITNHLRSTNQLNILN	IGP--LQNLSSSIPP	-----EDNECLKWLQTK--ESSVVY 273
Solanum_tuberosum	KAN-AVVLNSFEELDP-IINKDLKSK-LQVLN	IGPLVILSNNVFLDANS	-----DESGCIHWLDNCK--ERSVVY 266
Dianthus_2	KAK-VVTLNVFQELSP-LVVNDLNSK--LKL	LCVGPFLCPP--QVYS	-----DPDNCLDWLDQHG--PKTIAY 278
Vigna_mungo	QAE-AVVVNFEEELDPPLLVNDMKSFKF-YYLY	VGFLTSLPLPLPPSDDTET	-----GCLSWLDDK--KG-GS-VVY 277
3WC4_Clitorea	QAK-AVVVNFEEELDPPLFVKYMRSKLQ-SLLYV	---VPLPCPQLLPEIDN	-----GCLSWLDDK--SS-RS-VAY 268
HBF_MED_B	RAN-AVAINSFATHP-LTENELNSK-FKLLLV	GPFNLTTPQR-KVSDEH	-----GCLWLDQHE--NSSVVY 277
C1Z_VIT_B	KAT-AVFINSFEELDD-SLTNDLKSCLK-TYLN	IGPFNLITP--PPVVPNTT	-----GCLQWLKER--KP-TS-VVY 275
Populus_1	KAA-AVFINSFEELDP-RITRDLKSRFK-EFLN	IGPFNMISP--APPAADTY	-----GCITWLDKQ--KL-AS-VAY 274
Fragaria	LAT-AVFINSFEELDP-VITNDLKSFK-RFLNV	GPLDLLEPTASAAATTPQIAEAVAGD	GCLSWLDDK--KA-AS-VVY 285
Litchi	QGD-AVVNSFEELDP-TINNDLKSFK-QFLNV	GPFNLTSPPAVP	-----DTSSCLPWLDRQ--KP-AS-VAY 277
Prunus	RAN-AVVLNSFEELDI-AVTNDLKSFKFN-KLLN	VGPFNLAAASPPLEAPTAADDVT	--GCLSWLDDK--KA-ASSVVY 294
Eustoma	KAS-ALPVNSFEELDP-PLIQDLKSK-FKNVLN	VGPFNLTPPPIANT	-----TDIHGCIWLDKQS--PRSVY 272
Aralial	RAA-AVPINSFEELDP-DLMKDKSK-FKKILN	VGPFNLTSPPSSN	-----SDEHGCIWLDNQN--PKSVAY 274
Actinidia	KAT-TVLINSFEELDP-ELNKVLNSN-FGKFLN	IGPNSLTSHPHLSN	-----SDEYGCIPWLAKOR--SASVAY 275
Diospyros	KAK-FLAVNSFEGLS-EASEVLNSN-FTKLLY	IGPLNLCPAPATGPSSF	-----SDEYGCILWLDK--PTSVAY 278
Iris_2	RSTTIILNSFEGLHP-EIDADLAKFR-KPLP	IGPLNLFFSPAVP	-----EPVSSSRCLAWLDDKFE--PDVVY 282
Hordeum	KAAIAVALNTFPGLDPPDLIAALAEALP-NCL	PLGPYHLLPGAEPATDNE	--APADPHGCLAWLDRRP--ARSVAY 281



	C1		PSPG MOTIF		
Populus2	VSFGSVITPPPHHELVALAEALETETPPFIWLSKDN	SKVHLPHGFLDRT	---SQGLVVPWSPQLEVL	LAHRAVGVFVTHCG 350	
Garcinia_mangostana	VSFGSAIPLPHELVALAEALEDRKVPFIWLSKDN	AKVHLPDGFLETHK	---FQGIWVPWAPQAKVL	GKAVGVFVTHCG 354	
Arabid7	ISFGTVMTPPPGELAAIAEGLESKVPFVWLSKESL	VQLPKGFLDRT	---EQGIVVPWAPQVELL	KKHEATGVFVTHCG 358	
Rosa_1	VSFGSVIRPSPPELMALAEALEASRVPPFLWLSR	NLMTPKLDDEFISKAE	---LNGMVVPWVPPQVLA	HGSGVGAFTVTHCG 366	
Citrus_paradisi	VSFGTVAITPSPNEIVAIAEALEANKVPFIWLSR	HRSQANLPLNGFLERT	---SDGIVVDWAPQVNVLA	HAHRAVGVFVTHCG 365	
Dianthus_1	VSFGSVARPDATETIATAQALEASQVKFIWLSI	RDLKLVHLPGGFIENIK	---DKGMVVSWPQTA	VLAKHRAVGVFVTHCG 357	
Petunia_2	IGFGTVAITPPPNELKAMAEALEESKTPPFLWLS	KDLFKSFFPEGFLERTS	---EYGKIVSWAPQVVL	SHGSGVGFVTHCG 348	
Lobelia_erinus	IGFGTVAITPPPHHELVALAEALEESGTPPFLW	SINENSKKHLPEGFLERTG	---ENGKLVWAPQVQVLA	HGSGVGFVTHCG 351	
Rosa_2	ISFGSVIRPPPHHELAFAEALIESAFPFIWLSFR	GNPDDILPKGCDKSS	----LNGKLVSWAPQV	QILEHAHRAVGVFVTHCG 355	
Rosa_3	ISFGSVGALPPMEVAALAEALEEGFPFLWLSFR	GNLED-FPKGFIERT	----STGRVVPWNQV	QVILNHPISIGVFTVTHCG 358	
Populus3	ISFGSVITLPPQELAEALVEALKECKLPFLWLS	FRGNPKPEELPEEFLERTK	---EKGKVVSWTIPQ	LKVLRHKAIGVFTVTHCG 350	
Forsythia_intermedia	ISFGTVMTPPREMAGLAEALETGEFPFLWLSLR	DNAMKLLPDGFLDRTS	---KFGMIVSWAPQ	LKVLNHPISVGAFTVTHCG 350	
Perilla_3	ISFGTVMTPPELAAALADALEAICRFPPFLWLS	LKDYAVKSLPDGFLDRTK	---GFGKIVAWAPQV	LAHRNVGVFTVTHCG 343	
Gentiana_triflora	ISFGTVMNPPPNEMAALASTLESRKIPFLWLSR	DEARKHLPENFIDRTS	---TFGKIVSWAPQ	LHVLENPAIGVFTVTHCG 350	
Solanum_tuberosum	ISFGTVMTPPPNEIIAIAEALDEKMTFVWLSR	DNGVKILPKGFLERTK	---EYKIIISWAPQ	LEILAHRSVGVFTVTHCG 343	
Dianthus_2	ISFGTVAITPPPHHELVALAEALEESGDPFVW	SMSDSVRAKNEPFIQNEP	KVGVKIVSWAPQ	LEILGHPISVGVFTVTHCG 358	
Vigna_mungo	VSFGTVMTPPPHEIVAVAEALEASGFPFLWLS	LKHLKGVLPNGFLERTS	---ERKVVGWAPQ	TVLGHGSGVGFVTHCG 354	
3WC4_Clitorea	VSFGTVMTPPPQEVVAVAEALEESGFPFWALK	ESLILPKGFVERTS	---TRKVVSWVPP	SHVLSHGSGVGFVTHCG 345	
HBF_MED_B	ISFGSVITPPPHHELVALAEALEESGFPFIW	SFRGNPKPEELPEEFLERTK	---TKGKIVAWAPQ	LEILGHPISVGVFTVTHCG 354	
C1Z_VIT_B	ISFGTVMTPPPAEVVALSEALEASRVPPFIW	LSRDKARVHLPFGFLERTK	---GYGMVVPWAPQ	AEVLAHRAVGAFTVTHCG 352	
Populus_1	ISFGSVITPPPHHELVALAEALETSGVPFIW	LSKDNKSVHLPNGFLDRT	---SQGLVVPWTPQ	MEVLAHRAVGVFTVTHCG 351	
Fragaria	VSFGSVIRPSPPELMALAEALEASRVPPFLW	LSRDLNKLNPQDLFSGK	---LNGMVVPWAPQ	VLAHGSVGAFTVTHCG 362	
Litchi	IGFGSVIRLPPNEIVAVAEALEASKLPFIW	LSKKNLQADLPN	----RK	---LNGIMVEWAPQ	LDVLAHNAVGVFINHGG 349
Prunus	VSFGSVARPEKELMAMAQALEASGVPFLW	LPKDSFKTPLNELLIKA	----TNGMVVPWAPQ	RRVLAHRSVGAFTVTHCG 370	
Eustoma	IGFGTVAITPPPELKLAEALVDIKTPFLW	LSKDNMRSHLPEGFSERSG	---ETGKIVWAPQ	VKILEHRSVGVFINHCG 349	
Aralial	IAFGTVAITPPPNELVSLAEALEESGTPPFLW	SKDNFKNHLPKGFLERTS	---KSGKIVAWAPQ	IQVLSHDAVGVFTVTHCG 351	
Actinidia	IGFGSVAKPKPDEVVAIAEALEASGTPPFLW	SRDTSKQYLPFGFLERTS	---ELGKIVWAPQ	VQVLAHRSIGVFTVTHCG 352	
Diospyros	IGFGTVMTPPLADDELVALANALEARAMPFLW	SIKDSLKHLPEKLEKMN	---RTGKMVPWTPQ	VQVLAHRSVGVFTVTHCG 355	
Iris_2	VSFGTVMTPPLPSELAEALGLSESFPFLW	SIKDPKAKLPAGFLDRT	---RGLLVWIPQ	VAVLHNNAVAFLSHCG 359	
Hordeum	VSFGTVMTPARPDELQELAEAGLEASGAPFLW	SLRG-VVAAAPRGFLERAP	----GLVVWAPQ	VGLRHAHRAVGAFTVTHAG 355	



	C2		PSPG MOTIF	
Populus2	WNSLLESIAAGVPMICRPFPGDQRLN	GRMIEDVWEIGLKVEDG-VFTK	LEVLNLSLNKILSHEG-GQKMR	ENIRALKQLAK 428
Garcinia_mangostana	WNSLLETIVGGVPMICRPFYGDQRLN	NARMIGDVWIKGIVVNGG-VL	AKEAMIDCFDKILLQED-GQ	KMRGRIKSLKDLAL 432
Arabid7	WNSVLESVSGGVPMICRPFYGDQRLN	GRAVEVWVEIGMTIING-VFT	KDGFCEKLDKVLVQDD-GK	KMKNAKLLKELAY 436
Rosa_1	WNSVLESLAGGVPMICRPFYGDQRLN	ARMVDEWIKGLKLEGG-VFT	KNGMLKSLDILLSQKK-GN	IMRDTINTFKQLAQ 444
Citrus_paradisi	WGSILESIAGVPMICRPFYGDQRLN	GRMEEQVWGVAVDGGGICT	KEGLSSLDLILCOEK-GIK	IREKVTKQLCQ 444
Dianthus_1	HNSIMESIASEVPMICRPFYGEQ	LNRIEAKWCIGLVVEGG-VFT	KDGLVLSLNKILGSTQ-GE	EMRNIRDLRLMVD 435
Petunia_2	WNSVLESIAAGVPMICRPFYGDQRLN	ARMVDEWIKGLKLEGG-VFT	KDGTMLALDLVLSKDKR	TELKQIGMYKBLAL 427
Lobelia_erinus	WNSVLESIGAGVPMICRPFYGEQ	LNTRMVENVWRIQVVRKGG	-VFTRSQTVQALEEVLH	Q-KGKKLKEQVVVKELAH 429
Rosa_2	WNSLLESIVGGVPMICRPFYGDQRLN	MRVETVWIGVVEGG-VLTK	HCAIKALELILRGKA-GN	EMREKIKVKNLQ 433
Rosa_3	WNSVLESICGVPMICRPFYADQRLN	MRVVEWVKIGRIEGG-VFT	KSGAIKVLQALSLEQ-GK	EMRQVGVKQLAQ 436
Populus3	WNSVLESIAAGVPMICRPFYGDQRLN	TRITEAVWTEGLEIEGG-RI	TKGGLMKALRLIMSTDE	-GNKMRKQLHQLGLAL 428
Forsythia_intermedia	WNSILESIISVPMICRPFYGDQRLN	SKMVEDVWIKGVRLEGG	-VFTKNGTIEALHSVMLNET	-GKAIRENINKLKRKAQ 428
Perilla_3	WNSILESISSVPMICRPFYGDQRLN	SRMVQDSWKIGVRVEGG	-VFTKNEAVESLKKLMATEA	-GMKIRENVSLLEKAT 421
Gentiana_triflora	WNSLLESIFCRVPMICRPFYGDQRLN	ARMVEDVWIKGVRVEGG	-VFTEDETRVLELVLFS	DK-GKEMRONVGRLEKAK 428
Solanum_tuberosum	WNSILEGISVPMICRPFYGDQRLN	SRMVESVWEIGLQIEGG	-NFTKSGTISALSTFFNEEK	-GKVLKRVVEGLKEKAL 421
Dianthus_2	WNSIMESISTGVPMICRPIIGDQ	ELNQRIVEIELKFGIGIEGG	-CFTQSGTTNALNQVLASEK	-GEEMRNVEELKKLAE 436
Vigna_mungo	CNSVFESMSNGVPMICRPFYGDH	LTRMVEDVWEIGVRVEGG	-VFTKDGLLSLRLILVEEE	-GNLMKKNAVKVKIVL 432
3WC4_Clitorea	ANSVMEISVNGVPMICRPFYGDQ	HAARVQDIWEVGVIVEGK	-VFTKNGFVKSLLNLILVQED	-GKKIRDALKVKQIVQ 423
HBF_MED_B	WNSVLEICVGGVPMISRPFFGDQ	LNITLIESVLEIGVVDNG	-VLTRESIKKALELIMSSEK	-GGIMRQKIVKLKESAF 432
C1Z_VIT_B	WNSLWESVAGGVPMICRPFYGDQRLN	GRMVEDVLEIGVRIEGG	-VFTKSGMLSCFDQILSQEK	-GKLLRENLRALRETAD 430
Populus_1	WNSLLESIAAGVPMICRPFYGDQRLN	GRMVEDAWKIGLQVEDG	-VFRKHGVLNLSLQVLSQDS	-GEEMRENIRALQQLAK 429
Fragaria	WNSVLESVAGGVPMICRPFYGDQRLN	ARMVEDVWIKGLRLEGG	-VFTKNGMLKSLDMLLSQDK	-GTKMKNKIHTLQQLAQ 440
Litchi	WSSLMESMACGVPMICRPFYGDQRLN	ARMVEDWIKGVSVEGG	-IITKRGFLRSLDLILWQEN	-GKMKRENVRKFKQLAE 427
Prunus	WSSLLETIAGGVPMICRPFYGDQRLN	ARLVEDVLEIGATVEDG	-VFTKHGMIKYFDQVLSQQR	-GKLLRENINTVKLLAR 448
Eustoma	WNSVMEISIAAGVPMICRPFYGDH	QLNTRMVEKVVQIGLRIEGG	-VFTKDATNRALVVFVFSHEK	-GKKIKQVVAVKLLAL 427
Aralial	WNSVLESIAAGVPMICRPFYGDH	INTMVENVWIKGVRVEGG	-VFTRTGTNNALEQVLLSQEK	GKLLKEQITVFKELAL 430
Actinidia	WNSVLETIAGGVPMICRPFYGDH	PMNTMVENVWIKGVRVEGG	-VFTKSSIMRALELVLSHE	-KGKLLKQDIGHLRELAL 430
Diospyros	WNSVLESIAAGVPMICRPLFGDQRLN	SKVVSQVWKGVRLEGG	-VFTKDGITRALDLVLEAE	-GKLLKENAEWFKELIAH 433
Iris_2	WNSVLESMTICGVPMICRPLFGDQRLN	SKVVSQVWKGVRLEGG	-PMTSTNVAEAIKTVVAGDE	-GKNMRDRAAKMREKAT 437
Hordeum	WASVMEGVSSGVPMACRPFYGDQRLN	ARSVASVWGFATFDG	-PMTIRGAVANAVATLLR	GED-GERMRAKQELQAMVG 432



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      :      *      :
Populus2      KAIGPN-GSSINNFIALSNLVFNKI--- 453
Garcinia_mangostana AATAVK-GSSSDNMRELSRLVSSPCK--- 457
Arabid7      EAVSSK-GRSSENFRLGLDAVVNI--- 460
Rosa_1      QAVEPK-GSSTRNFESLLEVISTAN--- 468
Citrus_paradisi NAIGPG-GSSMQNLDALVDMISRSY--- 468
Dianthus_1   KALSPD-GSCNTNLKHLVDMIVTSN--- 459
Petunia_2   NAVGPS-GSSAENFKKLVDIITSCN--- 451
Lobelia_erinus KAVGPS-GSSTENFKTLLEIITNMQSAT 457
Rosa_2      SAVEGD-GSSSKAFNCLVDIATNHEEV-- 459
Rosa_3      ETVGPN-GSSAQDLKVV----- 452
Populus3    DAVQSS-GSSTKNFETLLEVVAK----- 450
Forsythia_intermedia NAVKFD-GTSTKNFRALLELIKSPRGI-- 454
Perilla_3   AAVKPE-GSSSQNFKKLLEIIGAESS-- 447
Gentiana_triflora DAVKAN-GSSTRNFESLLAAFNKLDL-- 453
Solanum_tuberosum EAVKLDN-GSSIENFKVLVELVKCHKLT-- 448
Dianthus_2  ESVKQG-GSSNENFNALIELITSS---- 459
Vigna_mungo DAAGAQ-GKAAQDFNTLVELVSR----- 455
3WC4_Clitoria DAVGPH-GQAAEDFNTLVEVISS----- 446
HBF_MED_B   KAVEQN-GTSAMDFTLLIQIVTS----- 454
C1Z_VIT_B   RAVGPK-GSSTENFITLVDLVSKPKDV-- 456
Populus_1   KAIGPN-GSSINNFVSLSDLV----- 449
Fragaria    QAVEPK-GSSTRNFESLLEMATTN----- 463
Litchi      TAVGPQ-GSSMKNFKALVDIVSRPNDL-- 453
Prunus      QSVEPK-GGSAQNFKLLLDVISRSTKV-- 474
Eustoma     EAVGPN-GSSTKGFQAMVEVISTCQ---- 451
Aralial     KAVGPN-GSSTQNFKRLLLEVITT----- 452
Actinidia   KAVGPK-GSSSQNFNNLLEVITGHNL--- 455
Diospyros   KAAGKN-GSSTRSFDLVSRAQKDL--- 459
Iris_2      GSVRPD-GSSVRNLNTLLEIVFAR----- 460
Hordeum     KAFEPD-GGCRKNFEDEFVIVCRV----- 455
.....490.....500.....

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