

Supplemental Table S1. Prediction of conserved structural domains of FLA proteins in *P. deltoids*.

Name	Precursor protein backbones
PdeFLA1	MSLKSSSLFALCFSSFLFNTVRA SNITQILSQY PDFSTFSSYLTQTQLAGEINS RQTITVLVVENGNMSPLSGKPNGEIKNVLSGHVILDYYDVAKLQKLQNKTA MLTTLFQSSGQAKGQQGFLNVTVLGANSVAFGSAPGSSLSNLVKS SVSSQP YNISVLQVSNIIVPAGTGNTNSTT SPVPVGPCKT SPTFAS SPNKPPSTSNPPPRP SPTTADGPAAD SPAPSPFAMDGPAA TP AADGSLAD APSDLKSDASVINTGNN LALLALILLSAFVLA
PdeFLA2	MERLQHLLISLYLLLSINLTTITA Q SPAPAPAPP GPTNLGNTNNGLTILAPSDSA FSALKTGTLRLTDQEKVELMQFHIVPMFISSQFDTVSSPLKTHAGSGARFQ LNV TASGNLSNISTGLTNTTISDTVYTDTHLAIYQVDK VLLPLDIF TP KPPPPA PAPAP KLKEESE SPDDAVSKKDISSAVSFVMHHD TVFFIVGTVAISFSL
PdeFLA3	MQLTVLLSLLFLLSTATTITYG HNITSILGQHPSLSTFNHYLTLTHLAGEINRRT TITVCVVDNAAMSEILSKKPSISTIKNILSLHVLLDYFGTKKLHQIRDGTALAA TMFQATGS AP GSTGFVNITDVKGGK VAFGPKDNGGNLDVFYVKSVEEIPYNI SVIQISKLLPSDVAA APTPEPSAMNITDIMS AHGCKVFADTLIANPDA SKTYQ DTIDGGLTVFCPLDDPFKAFLPKFKNLTASGKESLLQFFGVPVYQSLAMLKS NNGIMNTLATNGDKKFDFTVQNDGEDVTLKTRGTTAKIVGTLIDEQPLAIYS IDK VLLP KELFKAAL TPAPAPAPEEAAD AP KSSKHKKPSADD AP SD SPAD SPD GDAADQTADDNASVRLDGGRLVAMVLSLCLGLLML
PdeFLA4	MAKYLF SFLLLL TTTTATS TFNPICTF SPTPSP TSAT TPAPTP ITNTNTNIAL SP TF APSPIITIP TPAPSSAPTP INN TTTTTL TPTT TPST APTP IPTNKITLTP TFAPSLA PTPTII TPILGP SPAPTP ISSSTFTT TP TFDP SPAPTP TNSSIFTATFSSLPP TPSTFI PQQDDLK FVFQEIQIYNIIDAILGTGDFK N WANALSMADSTTFPISATFFIPSDN SLSPITTSADPDIFPYHIVPQRLSFADLQQFKTFSRLPTLLFDKSILITNNSASHF TLDGSR LTHPDIYTNAAITVHGIDNLL DHSVYGTESGKNSSKPD AVGPPP TPA SPPRPT TPRTFVPSTADDEEFTVHQHGESDAACLCTEVWTVFLVLCVALASKF QRMILVH
PdeFLA5	MMGLCSICSKAA SPPAPTPTP SS SPAPAPAPTTP YKPSLSNLTQDQVKQLILFH ALPHYALADFKNLSQVSPVSTFAGAGGYALNFTDVS GTVHLDSGWSKTKV SSSVHSTDPVAVYQVDKVL FLRRYLVL IYP SPAPAPAP ETSLAAD SPSSDSTGD GSAPGTSLQILLIGSLV
PdeFLA6	MEFSMIMFSSTLVFLCTPVAYA QTAA TPAPAPTTP SS SPAPAPAPTTP YVSLTDL LSVAGPFHTFLSYLESTKVVDTFQNQANNTDEGITIFKPSLSNLTQDQVKQLI LFHALPHYALADFKNLSQVSPVSTFAGAGGYALNFTDVS GTVHLDSGWSK TKVSSSVHSTDPVAVYQVDK VLLPEAIFGADIPP APAPAPAP ETSLAAD SPSSD STGDGS APGT SPPN SSYRIFGVDVWSQLV LALIGVLVFL
PdeFLA7	MISILAQERLLGAALGAAGFIVYEQRKRIYQSI SP EHPQSQLREPIFGKQFR SEFELSWNKAVDQTFGLVSLNSRQ SFAA APVMPPT TPVK APPTAPSQA S AQVAT SP GPVDVIKILQKAGH FTVFVRLMQATTEDTELNKELNKTNNGITIFA PSDSAFSSLKAGFLNALSDEDKTELVKFHVLPALISSSQFQTVSNPVRTQAGT

	GPRVTLNVTTTGNFVNITTGLTNTSISGTVYTDSQLAIYQIDKVLFPDLDFTPK PPAPAPAPELGKPRKAPGVESTAPKDNSGALTPLILHDNALLLAVSCMVAA IFS
PdeFLA8	MESSPKLSILLILSLSIIISSTSIDGVETTTFSSNLSPQSPQPQISTSDHFHDHSFSS HTNLLAPILSHLGFTQLAMAVPSLPADSTTTAWSGPSTLFAPSDSSLRTCFSCS IPDLLHEHIVPGLFSIDYLRKLAFGTKIETLSPGRGITVTSTSLKNDSATPSTVK VFIGGVEITHPDLFNNGVLIHGIIRGYIAPLSPFSCDFERLSSLFPFQEGVTPH VTSTTHQQGIGTLVQPAIMRLMLRDAMLRLRSNGFTILSLAMRVKYPELTNL VNMTVFALDDVSIFSGSHGYISSVRFHIVPNHYLSTADLERLPVGATLPTLER GQALVVTSAGGLTGENTAVPMRINYVRVKVPDVMRNLKIVVHAVYLPFRIH PTSAAAFDEMMGIGGEGQNIVAEDAACSAVFEEDGSCGMVPPMPAQVKPS VVVRSDEDHHGL
PdeFLA9	MRKQLLSPFVFLMFFLYSSTVAQTPSPAPSGPTNITAILEKAGQFTTLIRLM KSTQEADQINTQLNNSNQGLTVFAPPDRAFTNLKAGTLNLSLSDQKQVQLVQ FHIIPNFFSMSSFQTVSNPLRTQAGNSADGEFPLNVTTSGNQVNITTGVNTAT VANTIFTDGQLVVYQVDQVLLPLDLFGTAAAPAPAPSKPKDKVPAKAPAGSK ADASVDSSESKGVDEEM
PdeFLA10	MARINPAISQITPTTTLTYFLLLLTTTTITPILAITNLTALLSSFPDFSSFTSLL ASTPSITSDLSNRSALTLLVIPNSYLSSSLDLTRRLSPSSLTDLLRYHILLQYLSS SDLHQLPPAGALITTLFQTTGRASSNFGSVNITRNPVTNAITISSPSPFSSSNAT VLSLIKTLPPYNSIISVNSLLVPYGFDFLMASETRPSLGLNITKALLDGRSFFVA ASLLSASGVVQEFEADEGGAGITLVPTDSAFSDLSETDVSLQSLPADKKAD VLKFHVLHSYYPLGSLESIVNPVQPTLATEDMGAGSFTLNISRANGSVAIDSG IVLASVTQTVFDQNPVAIFGVSKVLLPKEIFGRNPVLTSPKPGNSDMGNALPPA VALSPESPKMLSSAPGVREENSGVGGQLQRFSTLPLLCALVVWYCI
PdeFLA11	MDSHICGVSKKTLFLFTLLCLSVSSISALPHQNKGTGNSTGTGQMINSNSVLVA LLDSHYTELAELVEKALLLQTLLEEAVGKHNITIFAPRNEALERQLDPEFKRFL LEPGNLKSLQTLVLFHIIQVRVGSNDWPGHKSNSPRHTTLCNDHLHLITKNSG KKVVGSAELTRPDDVTRPDGVIHGIEQLLVPQSVQEDFNRRRNLRSISAVLPE GAPVEVDPTRTHRLKKPEPPVRAGSPVLPYDAMAPGPSLAPAPAPGPGGPHH HFDGESQVKDFIQTLLLYGGYNEMADILVNLTSLATEMGRVSEGYVLTVLA PNDEAMAKLTDDQLSEPGAPEQIYYHIPEYQTEESMYNAVRRFGKIGYDTL RLPHKVAAQEAADGSVKFGSGDGSAYLFDPIYTDGRISVQGIDGVLPPEVEK ESTSVKKSVAVKVATTKPRRGKLMVACIMLGTGQDSRFTTCQ
PdeFLA12	MIHQYCHCYCWLKTLNRYRKLSTLLFIPYITRPHILICRLRNSFSTMNSPSTYF WSTSLHAYKGLCIISFEFKHKGSDNNKEGFGFIFLAKMDSKASSLLFIAFLC LISTSTAFNITKILAQYPEFANFNDLLSQSGLAQEMNSRQTITVLVLDNGSIDG LSGRPLDIKRILSAHVILDYDQIKLSKLQKASTIVTTLYQASGVADNRQGF LNISRTAEGIKFGSAMKGLVSLVKSIIYSQPYNISVLQVSEPIETPGIENMAP PPPPGTAAVPKKAPAPAPSTKTPFAAPPTAKTPAKSPAKSPSKAPAPSKEGPSTP TEAPAEGPVAADGPVAAGGPVADVADSPADTEVAEEAPAVAPAKAASSRM HVAGATVVIGLFCIMGF
PdeFLA13	MAPSPPCIHIFASILLSNFHLGFSSSSSSTLQENHSNGSYSGQINSNSVLVA LLDSHYTELAELVEKALLLQTLLEAVGKHNITIFAPRNEALERDLDPFKRIN

	<p> LSHNSSLHHHSTLCRDRILGSGEKLIDSAKIIQVNAVERPDGVIHGIERLL IPRSVQQDFNNRRSLQISAVKPEGAPEVDPRTHRLKKAPPAKPGSAPVLPIY DAMAPGPSLAPAPAPGPGGPHHHFNGERQVKDFIETLLLYGGYNEMADILV NLTSLATMGRLVSEGYVLTVLAPNDEAMAKLTTDQLSEPGAPEQIIYYHVIP EYQTEESMYNAVRRFGKISYDTLRLPHKVLAQEADGSVKFGHAENSAYLFD PDIYTDGRISVQGIDGVLFPLEEKEKSDTKTEMKSVKVAAKPQRRGKLEVA CRMLGTFGQDSHFTTCQ </p>
PdeFLA14	<p> MYFFYSVQHRPHLCPTMQPFILLFWLLFLHTCSQTFCQSPAQSPAATQTKAP VSPPPPAGPTDTIQILLKAGRFLSFVRLMKATHVDTQLFSQLNSSTDGITMFAP NDNAFTSLVAGAVGSLNDREKLEFVQFHILPRFLSISDFQTLSNPVKTLAGSD RKFPLTITSDNSVTVSSGLTKTSLNTIYTDKQVAIYEINKVLVPRDLFPAPP APAPAKPLAEPDPVAPRDASSALVIAWQHRVNVVLFGAGLYIAALVMDP </p>
PdeFLA15	<p> MRQRSFVLVLSLVFFFLHCTKTLCQSPAAPAMTPKTPVKAPPADSSQAPSA QVATSPGPVDVNKILQKAGHFTVFARLMQATTEDTELKELNTTNGITILA PTDNAFSSLKAGFLNSLSDEDKTELVKFHVLPAFISTSQFQTVSNPVRTQAGT GPRVTLNVTTTGNFVNISSGLTNTSISGTVYTDSQLAIYQLDKVLFPLDIFTPK PPAPAPEPALGPKKAAPDAESPSAPKDISGAPALLFLLNNALVLAVSCAFGA MIYS </p>
PdeFLA16	<p> MAIALSSFNIFFTFLVSTFHLGFSFSALQENHSNGTYSQINSNSVLVALLDS HYTELSELVEKALLQTLEDAVGKHNITIFAPKNEALERDLDPEFKRFLLEPG NLKSLQTLLLYHIVPNRINPSHNSLQHHSTLCRDRVKLSSQESGEKLIDSAKI IQVNAVERPDGVIHGIERLLIPRSVQQDFNNRRSLQISAVKPEGAPEVDPRTH RLKKAPPAKPGSAPVLPIYDAMAPGPSLAPAPAPGPGGPHHHFNGEKQVKD FIETLLLYGGYNEMADILVNLTSLATMGRLVSEGYVLTVLAPNDEAMAKLT TDQLSEPGAPEQIIYYHVIPEYQTEESMYNAVRRFGKISYDTLRLPHKVLAEE ADGSVKFGHPENSAYLFDPDIYTDGRISVQGIDGVLFPLEEKEKSGPKRKLR ALRLLSHKGEGGCLKWLAGCLGHLDKIHISPHASK </p>
PdeFLA17	<p> MQRLTILLSLLFLLSTSTTFTRGHNITHILGKHPSFSTFNHYLTLTHLAGEINSR TTITVCAVDNAAMSELLSKHPSIATIKNILSLHVLLDYFGTKKLHQIREGTAL AATMFQATGSAPGSTGFVNITDVKGKVAFGPEDNEGNLDVFYVKSLEIPY NISVIQISKVLPSDVAAAPTEPSAMNITDIMSAHGCKVFAGTLIANPEASKTY QDNIDGGLTVFCPLDDPFKAFFPKFKNLTASGKVSFLEFFGVPIYQSLAMLKS NNGIMNTLATDGEKKFDFTVQNDGEDVTLKTRSITAKIVGTLIDEQPLAIYTI DKVLLPKELFKAAPTPAPAPAPEKEVADAPKSSKHKKPSSDVVPSDSPADSPD GDLADQTADDNASVTLYGGRLVAMVLSLCSGLLL </p>
PdeFLA18	<p> MKHHFSVFLFPAIFLLHCTQTLSQTPTAAPAKAPAAASAPPPAATSSAQAPSPP VMVPVQVSKGPVNVIKILQKAGGFAVFIRLIKSTQEDIQVFSQLNDSRDGVTI FAPTDGAFSAIKSGSGSRFALNVITTENMVNVTSGLTNTSVSAIVYTDSQLAI YQVDKVLLPLDIFAPKALAPAPAPPKPKKDDGAESPLVPEDTSSSVSCIPLNSL IIFGAGMVAAVFTL </p>
PdeFLA19	<p> MVPQFLLSFLSILSFLLCPPTLAQSPAAPGPPGPTNVTKILEKGGQFSVFIR LLKATQEDVTLNGQLNNTNNAITIFAPSDNAFSSLKSGTLNSLNDQEKAELV QFHIPQYLSSSQFQTVSNPLTTQAGSGRLELNVTTTGNSVNITTGLTNTSVS GTIYTDNQLAVYQVDKVLLVDIFTPKPPTPAPAPEKPKRSKAAESPDAPED </p>

	NSGAVSLTVLNDVVFFGVGIVAAIFSL
PdeFLA20	MKQQYYSLFSFSFFLLFLHCTTTFAQTSPAA TF APAVVAAQPHGITNVTKILEKAGHFTIFIRLLRSTQEENHLFSALNDSSSGVTIFAPTDSAFSELKSGTLNLTSDGDKSELVKFHVVPTFLSTSQFQTVSNPLGTWAGTGNRLPLNVTSYPNSVNI TTGLTNTLSGTVYTDNQLAIYKIEKVLLPKDIFASK APAPAP V APAP EKSTKAVPAATAE SP V AP VDTSSALMFTQNHVVGVSVAIFAAMFAL
PdeFLA21	MATTPLSFFLLSLLLSLSLSLNAQAQTPTAPAPTPSGPVNFTAVLVKGGQFATLIRLLNSTQTLNQIENQLNSSSEGMTIFAPTDNAFNNLKAGALNGLNQEQVQLLQYHTLPKFYTMSNLLVSNPVPTQASGQDGVWGLNFTGQSNQVNVSTGLVEVQINNLRQDSPLAVYPVDKVLLPEALFGVKPPTA SPPAP SSKSNSTVAAAEPSTSKNSAGGRNVALGLVVGLGLVCMGILS
PdeFLA22	MKQQHSLSSFSFFLLLLHCANTFAQSPAA TF APAAVVAQPPAA TF TQAAQPHGITNVTKILEKAGHFTIFIRLLRSTQEENHLFSALNDSSSGVTIFAPTDSAFSELKSGTLNTSDGDKSELVKFHVVPTFLSTSQFQTVSNPLGTWAGTGSRLPLNVTSYPNSVNITTGLTNTLSGTVYTDNQLAIYKIEKVLLPKDIFASK APAPAP V APAP EKPTKAVPSANVE SP V AP VDISSAVTFMHNNVVGSLVIVAAAMFACNVEGF
PdeFLA23	MASCShwwH AP VYFIASAVLAFIAISTAMN SP SNNATRPTRPTSNYLSLNASRTLRESGFNIMATLLLI SP EMFFL SP NTTIFAIKDSSLVNTSLPPWFLKNLLQYHTSPLKLSMEDVFKKQPGSCFPTLVDRKKLAVTKIDAKERLAEINHVLVSHPMVLERRITHGVL AP FSSLRSKDVFYFGWESIQA AP ICDANSSLVSDANGPRIILEWTRIIHLLSSHRFVSFAIGLNSVLDRLADHKNLSSVTIFAPPELEFVASSPML EKIVRLHILPQRATYIELAALPDKQRLRLLPDEDLKITKGVGVTQGLAINGV EIAAPEIFSSKEFIVHGITQAFKMAKFPNASR
PdeFLA24	MATLQYSLLSFTLSALVSTILAHNITDILSGFPEYSEFNKYLTQTKLADEINTRQTITVLALNNGAMTALAAKHPLSVIKNALSLLVLDYDPTKLHQISKGTTLSTTLYQTTGN AP GNLGFVNITDLQGGKVGFGSA AP GSKLDSSYTKSVKQVPYNISILEISQPII AP GILT APAPTP SSVNITALLEKAGCKTFASLLQTSGVIKTYQSAADKGLTIFAPNDEAFKAAGVPDLSKLTNAEIVSLLQYHATATYSPFGSLKTSKDPISLASNGAGKFDLTVTSAGDSVTLHTGIGPSRVAETVLDSTPLVIFTVDNVLLPVELFGK APSPAP AGEPVS APSPSPSP VAS SPAPASVE APSP LAA SPPAPP VE TP GG APAD AP FGSENSTADGSAAVHVSVPVQVTVFATVICILMS
PdeFLA25	MKFSMIIVLSSTLLFSCTPLAYAQKVA SPPAPTPTSPAPAPSP YVNLTDLLSVAGPFHNFLNYLESTKVIDTFQNQANNTDEGITIFVPKDDAFKNLKKASLSNLTQDQLKQLILFHALPHYYSLSDFKNLSHVSPVSTFAGAGGYALNFTDTSGTVHLDGWSKTKVSSSVHSTDPVAIYQVDKVLLPEAIFGTDIPP TPAPAPAP DT SP TAD SP TSDDSAGAGS AP GK SPP NSSYRINGVGIWSQLVLAAGVLLVFL
PdeFLA26	MPRSLPLLALAI SLVLIAS TTTVNAHNITRILAKHPQFSTFNHYLTVTHLAAEINRRQTITVLALDNAAMSSLSKQLSVYTLRNVLSLHVLVDYFGTRKLHQITNGTELTATMFQATGS AP GASGYVNITDLNGGKVAFGAEDNDGKLDVYVKSLEEIPYNISILQISQPLNSAEAE AP TA AP TLNVTAILS NQG CKAFSDLLIASGAHTTFEENV DGGLTVFCPTDPVINGFMPKYKNLTAPQKVS LLLYHGIIYQSLQMLKTSNGIMNTLATNGANKYDFTVQNDGEVVTTLETKEPLVVYKINKVCCPGSCLRRLRRKKHRRLRGEGCADGPNAD AP SDESDDQTADNDNGVNMGGGRL

	AVVARVSFLGW
PdeFLA27	MVPQFLFSASFILFLLHCPPTLAQSPAAAPAPPGPTNVTKVLEKGGQFSVFIR LLKATQEDVTLNGQLNNTNNAITIFAPSDNAFSSLKSGTLNSLSDQEKAELVQ FHIIPQLSSSQFQTVSNPLTTQAGSGRLELNVTTTGNVSNITTGLTNTSVSG TIYTDNQLAVYQVDKVLLPLDIFTPKPPTPAPAPEKSKKRSKAAAPESEADT SGAVSFTVLNNVFFGVCMVAAIYSL
PdeFLA28	MDSHIYDVSEKTLFLFTLLCFSVASISALPHQNRTGNSTVAGQMINSNSVLVA LLDSHYTELAELVEKALLLQTL EEAVGKHNITIFAPKNEALERQLDPEFKRFIL EPGNLKSLQTLFFFHIIPQRVGSNDWPGHKSNPTRHATLCNDHLHLITKNSG KKFVGA AVLTRPDDVTRPDGVIHGIERLLVPQSVQEDFNRRRNLRISAVLPE GAPEVDP RTHRLKKEPPVRAGSPPVLPVYDAMSPPGSLAPASAPGPGPHN HFDGESQVKDFIQTLQYGGYNEMADILVNLTSLATEMGRLVSEGYVLTVLA PNDEAMAKLTDDQLSEPGAPEQIIYYHIPEYQTEESMYNAVRRFGKIGYDTL RLPHKVVAQEADGSKVFGSGDGSAYLFDPIYTDGRISVQGIDGVLPPEVEK ESTSVKKS VSSVKVATTTPRRGKLMEVACRMLGSLGQDSHFTTCQ
PdeFLA29	MRKQLLSPFPFLMFFLYSSTTFAQTPSPAPSGPTNITAILAKAGQFTTLIRLLK STQEADQINTQLNNSNQGLTVFAPADNSFANLKAGTLNSLSDQQKVQLVQF HILPNFLSMSNFQTVSNPLRTQAGNSADGEFPLNVTTSGNQVNITGTGNTATV ANTIYTDGQLVVYQVDQVLLPLDLFGTAPAPAPAPSKPEKDVPAKAPAGSKE DASVDSSGASIATVSFGIVLIAAISLKL
PdeFLA30	MSTMLLFLLILLISSVLAASSPFSNAMEILSTSGYLSMALTLEITSKRLHLES SAATIFAPLDIALARLGLSVLDLQYHISPVRLSGYLDLSPFGTRIPTLLPNH SLIVTTSLSYFDGKLSINGISIEESALVDFGSLIIFGTSEFFNSSLEISPNLTPAPAP SPSPAWMSTFFGQASHLLMPRGYSIMGTFLDAQLFGIKNQTRLTIFAPVDQA MDAYAKNVSDYSSIFRKHVVPGLFPRQDLEGFNDGTSLPTFSGGFMINLTKS GDVLVLSVVPVIFPEMYQSDWLIHGLNQLLMPLKEEELVGESFSELDGAE DKPDVLD FDDYVYGAP
PdeFLA31	MAPINPAISHITPTTTLTYFLLLLATTTPILAITNL TALLSSFPDFSSFTSLIT SIPSLTSDLSDRSALTLLVIPNSYLSSSLDLTRRLSPSALADLLRYHILLQYLSSS DLHQVPPSGALITTLFQTTGRASSNSGSVNITRNPVTNAITISSPSPFSSSNATV LSLIMTLPYNVSIISVNSLLVPYGFDMASETRPTLGLNITKALLDGHSFLVAA SLLSASGVVQEFEADEGGAGITLFVPTDSAFSDLSATAISLQSLPADKKADV L KFHVLHSYYPLGSLESIVNPVQPTLATEDMGAGSFTLNISRNVNGSVAIDSGIV QASVTQTVFDQNPVVIFGVSKVLLPKEIFGRNPMLTSKPGNTDMGNAQPPVS ALSPENSPKMLSSAPGVREEIKSGVGG LQWLSTLHLLCVFVCNCI
PdeFLA32	MGPQNL MINKSTAKILLHLLLSLLHQITTA TLTDQELDFALSSLRSYGYTLFP NAISTSDLRLQLLNQSSNATSTSTFTLFCPPDSLLFSVDL A STAPHYTKSLFLH VSPSRLSTSDLRNLTAASGGTYIDSLVPNHRLLIANS LAQLNGTVDGSILVNR VRVSV PDLFLGSDIAVHGLDGILVAGFEDKVEDTSFEAATWSPANAIGSAERN SPLAGRFPARRRKGRNHRQNGRNGGIRRNHRGRRINGRRHRGGRNVSGG TRGDGVTHGAFAMYNHRL
PdeFLA33	MEAF TLLVLLMIKVLVCSTSP TDIPSR SQDLFVATDEMARAN YFSFVMLINM APLDQKFQGNVTF LMPKDRILSKIRMHPNAVSDFLLRHSIPSPLFDHLLHIPP GSLIPSSNPDYMLNISNKGRKSSFFLN NVKISSPDLCTAGSSIRCHGIDGVLLVA

	TDRHPLPACSNST ^{SP} AVVA ^{TPPSP} SLPLPDIPSPFPSS ^{APP} PGAA ^{APT} DQEHNPKH SGSSQLESLSLGLLKFMATSILLLNARVLYTVGLN
PdeFLA34	^{MATSPLSLVLLSVFLSLSLHAQAQ} ^{APAAPAPAP} SGPVNFTA ^{VLV} KGG ^{QFVTFIS} ^{LLNKTQTFNQIENQINSSSEGMTIFAPTDNAFSLKSGALNGLSQQQQVQLL} ^{QYHMLPKFYSLNLLLVSNPVPTQASGQEGVWGLNFTGQSNQVNVSTGLVE} ^{VQVNNALRQDFPLAVYPVDKVLLEELFGAKPPSA} ^{SPPAP} ATKGSSSGKSNSS DTAAEP ^{SP} GKNSAGGRNVALGLIFGLGFVSVGILS
PdeFLA35	^{MKQOSISFFIFLLFLQCTYFAQ} ^{SP} AA ^{APAQ} APAVVA ^{SPP} AA ^{TPT} QAA ^{APH} GIT NVTKILEKAG ^{HFTIFIRLLRSTQEENHLFSALNDSSTGLTIFAPTD} SAFSELKSG ^{TLNNTLSDGDKSELVKFHVVPTFLSTSQFQTVSNPLGTWAGTGNRLPLNVTSY} ^{PNSVNITTGLTNTLSLSTVYTDNQLAIYKIEKVLLPKDIFASN} ^{APAPAP} ^{VAPAP} EKPAKAVPAANVE ^{SP} ^{VAP} VDISSAVWFMHNNVVGSGIVASAVFAL
PdeFLA36	^{MKQQLISSFSIFLLFLHCANTFAQ} IPAA ^{APAQ} APAVV ^{APP} PA ^{TPT} QAA ^{APH} G ITNVTKILEKAG ^{HFTIFIRLLRSTQEESHLSALNDSSTGLTIFAPTD} SAFSELKS ^{GTLNTRLRDGDKSELVKFHVVPTFLSTSQFQTVSNPLGTWAGTGSRLPLNVTS} ^{YPNSVNITTGLTNTLSLSTVYTDNQLAIYKIEK} GMKKVRVSFFKAKGPKA
PdeFLA37	MASHNVTKILEKAG ^{HFTIFIRLLRSTQEENHLFSALNDSSTGLTIFAPTD} SAFS ^{ELKSGTLNNTLSDGDKSELVKFHVVPTFLSTSQFQTVSNPLGTWAGTGNRLPL} ^{NVTSYPNSVNITTGLTNTLSLSTVYTDNQLAIYKIEKVLLPKDIFASN} ^{APAPAP} ^{VAPAP} EKPAKAVPAANVE ^{SP} ^{VAP} VDISSAVWFMHNNVVGSGIVAAAVFAL
PdeFLA38	^{MKQOSISSFFIFLFLQCTYFAQ} ^{SP} AA ^{APAQ} APAVVVA ^{QPPAAT} PAQAA ^{APH} GITNVTKILEKAG ^{HFTIFIRLLRSTQEENHLFSALNDSSTGLTIFAPTD} SAFSEL ^{KSGTLNNTLSDGDKSELVKFHVVPTFLSTSQFQTVSNPLGTWAGTGSRLPLNV} ^{TSYPNSVNITTGLTNTLSLSTVYTDNQLAIYKIEKVLLPKDIFASN} ^{APAPAP} ^{VAP} ^{PAPE} EKPAKAVPAANVE ^{SP} ^{VAP} VDISSAVWFMHNNVVGSGIVASAVFAL
PdeFLA39	^{MPRSLPLLALAI^{SLVLI}ASTTTVNA} HNITRILAKHPQFSTFNHYLTVTHLAAEI ^{NRRQTITVLALDNAAMSSLSISKLSVYTLRNVLSLHVLVDYFGTRKLLHQITN} ^{GTELTAT} MFQATGS ^{AP} GASGYVNITDLNGGKVAFGAEDNDGKLDVAVYVKS EEIPYNISILQISQPLNSAEAE ^{AP} TA ^{AP} TLNVTAILS ^{NQGC} KA ^{FS} DL ^{LI} ASGAHT ^{TFEENV^{DG}GLTVFCPTDPVINGFMPKYKNLTAPQKVSLLLYHGIPIYQSLQML} ^{KTSNGIMNTLATNGANKYDFTVQNDGEVVLTETKVTTATITGTVKDEEPLV} ^{VYKINKVLLPRELFKA} ^{AP} EKK ^{APAP} KGEKDVADGPNAD ^{AP} SDESDDQTADN DNGV ^{NK} MGGRLAVVAP ^S FFFGVVMFFLED
PdeFLA40	^{MRQQYVFTTLTLLILFSLSCSTTLA} ^{QAPAL} ^{APAP} SGPTNVTKILEKAG ^{QFTLFI} ^{RLKSTQVANQLLQQLNNSNNGMTVFAPTDNAFSSLKSGTLNSLTDEQKVE} ^{LVQFHIVPTYLTSSQFQTVSNPLRTQAGDSGDGKFPNITTS^{GN}SVNITTGLTN} ^{TSVSGTIYTDGQLAVYQIDQVLQPLQIF} ^{AP} RP ^{APAPAP} AKSKNKKATTVAD ^{SP} DV ^{TP} ADNSKAATLQNVGLFGVAALVIALSL

Green: Signal peptide; Red: AGP-like glycosylated regions;
Yellow: Fasciclin domain; Gray: GPI-anchor protein;