

AP3 MARGKIQIKRIENQTNRQVTYSKRRNGLFKKAHELTVLCDARVSIIMFSS-SNKLHEYIS [59]
 DeAP3 -----AGIMKKARELTVLCDAEVSLIMFSS-TGKFSEYIS [34]
 DEF MARGKIQIKRIENQTNRQVTYSKRRNGLFKKAHELSVLCDAKVSIIMISS-TQKLHEYIS [59]
 GDEF1 MGRGKIEIKKIENNTNRQVTYSKRRNGIFKKAHELTVLCDAKVSLIMFSN-TGKFHEYIS [59]
 GDEF2 MARGKIQIKKIENSTNRQVTYSKRRNGLFKKASELTVLCDAKVSIIMVSC-TDKLHEYIS [59]
 Gu.ti.AP3_4 -----QELTVLCDAKVSIIMISNGSNKCHEYTS [32]
 Gu.ti.AP3_5 -----LKKAQELTVLCDAKVSLIMISIGSNKCHEYTS [32]
 HmAP3 -----NGLFKKANELTVLCDAKVSIIMFST-TNKLHEYIS [34]
 HmTM6 -----NGI IKKAQELTVLCDAKVSLIMIST-TGKFHEYTS [34]
 HPDEF1 MARGKIQIKKIENSTNRQVTYSKRRNGLFKKASELTVLCDAKVSIIMVSC-TDKLHEYIS [59]
 HPDEF2 MARGKIQIKKIENSTNRQVTYSKRRNGLFKKASELTVLCDAKVSIIMVSC-TDKLHEYIS [59]
 JrAP3 -----IENETNRQVTYSKRRKGLFKKAHELTVLCDAKVSLIMISS-NKKLRDYVS [49]
 TAP3 -----NGLFKKANELTVLCDAKVSIIMISS-TGKLHEFIS [34]
 TM6 ---GKIEIKKIENSTNRQVTYSKRRNGIFKKRKELTVLCDAKISLIMLSS-TRKYHEYTS [56]
 MASAKO_B3 MGRGKIEIKLIENQTNRQVTYSKRRNGIFKKAQELTVLCDAQVSLIMQSS-TDKIHEYIS [59]
 MdMADS13 MGRGKIEIKLIENQTNRQVTYSKRRNGIFKKAQELTVLCDAKVSLIMLSN-TNKMHEYIS [59]
 MdTM6 MGRGKIEIKLIENQTNRQVTYSKRRNGIFKKAQELTVLCDAKVSLIMLSN-TSKMHEYIS [59]
 NMH7 MARGKIQIKRIENTTNRQVIYSKRRNGLFKKANELTVLCDAKVSIIMFSS-TGKLHEYIS [59]
 NTDEF MARGKIQIKRIENQTNRQVTYSKRRNGLFKKANELTVLCDAKVSIIMISS-TGKLHEFIS [59]
 NTTM6 -----AKISLLMLSS-TRKFHEYTS [19]
 PcAP3 -----IENPTNRQVTYSKRRSGIFKKAKELTILCDAQVCLIMFSN-TGKVCEYVS [49]
 PhDEF MARGKIQIKRIENQTNRQVTYSKRRNGLFKKANELTVLCDAKVSIIMISS-TGKLHEFIS [59]
 PhTM6 MGRGKIEIKKIENSTNRQVTYSKRRNGLFKKAKELTVLCDAKICLIMLSS-TRKFHEYTS [59]
 PnAP3_1 -----SGIFKKAKELTILCDAQVCLIMFSN-TGKVCEYVS [34]
 PnAP3_2 MGRGKIEIKRIENATNRQVTYSKRRSGILKKAKELTVLCDAEVSLIMFSS-TGKMTEYLS [59]
 PtAP3_1 -----NGIFKKALELSVLCDAKVSIIMVAT-NRKLHEYTS [34]
 PtAP3_2 -----NGIFKKALELSVLCDAKVSIIMVAT-NRKLHEYTS [34]
 PTD -----NGI IKKAQELTVLCDAKVSLIMIST-TGKFHEYTS [34]
 RAD1 MARGKIQIKRIENDTNRQVTYSKRRSGLFKKAKELTILCDAKVSIIMISN-TNKLHEFIS [59]
 RAD2 MTRGQIQIRRIENITNRQVTYSKRRNGLFKKQELVVLCDAKVSIIMISS-RNKLHEFTT [59]
 RbAP3_1 -----AGI IKKAQELTVLCDAEVSLIMVSS-SGKCVDFIS [34]
 RbAP3_2 -----AGIMKKAQELTVLCDAKVALLMISNTHKISEYVS [35]
 Ri.sa.AP3_1 -----NGLFKKATELTVLCDAKVSIIMFSS-TNKLHEYLS [34]
 Ri.sa.AP3_2 -----NGLFKKATELTVLCDAKVSIIMFSS-TNKLHEYLS [34]
 SLM3 MARRKIQIKKIENLTNRQVTYSKRRNGLFKKANELTVLCDATVSIIMLSS-NLKLHEFLS [59]
 STDEF MARGKIQIKKIENQTNRQVTYSKRRNGLFKKANELTVLCDAKVSIIMISS-TGKLHEFIS [59]

AP3 PN--TTTKEIVDLYQTI SDVDVWATQYERMQETKRKLLLETNRNLRTQIKQR-LGECLDEL [116]
 DeAP3 PSAT--TKRMFDQYQVSGVNLWNSHYERMQDNLNKQKEINNKLRRREIRQR-MGEDLNDL [91]
 DEF PT--TATKQLFDQYQKAVGVLDLWSSHYEKMQEHLKKLNEVNRNLRRREIRQR-MGESLNDL [116]
 GDEF1 PS--TTTKMYDQYQSTVGFDLWSSHYERMKETMKKLDKDTNNKLRRREIRQVLDGEDFDGL [117]
 GDEF2 PS--ITTKQFFDQYQKASGIDLWNSHYEKMQEELRQLKEVNRNLRRRQIRQR-LGDCLEDL [116]
 Gu.ti.AP3_4 SS--TSTKSIYDQYQKASGIDLWSSHYEKMQDLSRKLKDTNNLRKEMRQR-MGEDLDDL [89]
 Gu.ti.AP3_5 SS--TSTKSVYDQYQKASGIDLWSSHYEKMQDLSRKLKDTNNLRKEMRQR-MGEDLDDL [89]
 HmAP3 PS--ISTKELFDLYQTTMGIDLWSSHYERMQENLKKLKDVRNLRRMEIRQR-MGESLNDL [91]
 HmTM6 PS--TTTKQIYDQYQKTLIDLWSTHYERMQEHLRKLKEVNNKLRRREIRQR-LGEDLNDL [91]
 HPDEF1 PS--TTTKQFFDQYQKAAGIDLWNSHYEKMQEELRQLKEVNNKLRRRQIRQR-LGDCLEHL [116]
 HPDEF2 PS--TTTKQFFDQYQKAAGIDLWNSHYEKMQEELRQLKEVNNKLRRRQIRQR-LGDCLEHL [116]
 JrAP3 PS--TTTKQIFDQYQHTMGVLDLWSSHYERMQEELKKNLNDVNRSLRRREIRHR-RGESLIDL [106]
 TAP3 PS--ITTKQLFDLYQKTIGVDIWTTHYEKMQEQLRKLKDVRNLRRRKEIRQR-MGESLNDL [91]
 TM6 PN--TTTKKMIDQYQSALGVDIWSIHYEKMQENLKRKEINNKLRRREIRQR-TGEDMSG [113]
 MASAKO_B3 PT--TTTKKMFQYQKNLQIDLWSSHYEAMKENLWKLKEVNNKLRRDIRQR-LGHDLNGL [116]
 MdMADS13 PT--TTTKSMYDDYQKTMGIDLWRTHEESMKDTLWKLKEINNKLRRREIRQR-LGHDLNGL [116]

MdtM6 PT--TTTTKSMYDDYQKTMGIDLWRTHYESMKDITLWKLKEINNKLRRREIRQR-LGHDLNGL [116]
NMH7 PS--ASTKQFFDQYQTTVGIDLWNSHYENMQENLKKLKDVNRNLRKEIRQG-MGECNLNDL [116]
NTDEF PS--VTTKQLFDLYQKTVGVDLWNSHYEKMQEQLRKLKDVNRNLRREIRQR-MGESLNDL [116]
NTTM6 PN--TTQKKMIDQYQRTLGVDIWSTHYERMLENLKRLKEINNKLRRREIRQR-TGEDMSGL [76]
PcAP3 PS--TTMKEFFDRFRRTNIDLWASQYETLQEELKKQKEINSRLKKEIRQRTGQDDLNEL [107]
PhDEF PS--ITTKQLFDLYQKTVGVDLWNSHYEKMQEQLRKLKEVNRNLRKEIRQR-MGESLNDL [116]
PhTM6 PN--TTTTKMKMIDLYQRTLGVDIWNKHYEKMQENLNRLKDINNKLRRREIRQR-TGEDMSGL [116]
PnAP3_1 PS--TTMKEFFDRFRRTNIDLWASQYETLQEELKTQKEINNKLKKEIRQRTGQDDLSEL [92]
PnAP3_2 PSLNGNTRKRVYDKYQQLSGISLWNSHYESLQNALNKQKEINRRLRREIRQR-MGEDLDEL [118]
PtAP3_1 PH--TTTTKELYDLYQKASGKSLWNSHYERMNDNLNKLKEINNKLRTREIRQR-MGEDLDEL [91]
PtAP3_2 PH--TTTTKLDLYDLYQKASGKSLWNSHYERMNDNLNKLKDINNKLRTREIRQR-MGEDLNDL [91]
PTD PS--TTTTKQIYDQYQKTLIDLWSTHYERMQEHLRKLKEVNNKLRRREIRQR-LGEDLNDL [91]
RAD1 PN--ITTKQVYDAYQTTFSPLDWTSHYAKMEQELRNLNNEVNRQIRKEIRRR-MGCCLEDM [116]
RAD2 PG--TTTTKQIYDMYQQLSGNDVWSSQYAMMLEELRRIKEANGNIRKEIRRR-MGFSMEDM [116]
RbAP3_1 PT--ISQKEFYDKYQKITKQDLWKSQYDEMQRERFKHLMETNRKLRRREIGQVRG-EDLEGL [91]
RbAP3_2 PG--TSFKAIYDQYEKTSQVSLWDSYERMQRNLKVKVEDNNKLRRREIRQR-QGDDLDEL [92]
Ri.sa.AP3_1 PF--ISTKQVFDQYQNKLGIDLWQTHYERMQEHLKQLKDVNNNLRMEIRHR-MGASLDGL [91]
Ri.sa.AP3_2 PF--ISTKQVFDQYQNNLQIDLWQTHYERMQEHLKQLKDVNNNLRMEIRHR-MGASLDGL [91]
SLM3 PGSNLTTKDVYDRYQKALGVDIWTHEKRMQDDLQKLNELNRKLQTDIRQR-MGDCLEDL [118]
STDEF PS--ITTKQLFDLYQKTIGVDIWTSHYAKMEQELRKLKDVNRNLRKEIRQR-MGESLNDL [116]

AP3 DIQELRRLEDEMENTFKLVRERKFKSLGNQIETTTKKNKSQQDIQKNLIHE---LELRAE [173]
DeAP3 SIEELRGLEQNMDNSLKIIVRDRKYHVITTTQETETRYKKLRLNHETHNNLLREFE-----GR [146]
DEF GYEQIVNLIEDMDNSLKLIRERKYKVISNQIDTSKKKVVRNVEEIHRLNVLE---FDARRE [173]
GDEF1 DMNDLTSLEQHMQDSLTLVVRERKYHVIKTQTDTCRKRVRNLEQRNGNLRDLDET----- [171]
GDEF2 GFEEFLDLEKESQEAVYIIRERKLVIGNKLETSSKVVRSQDVYKMLMHE---FDIRGE [173]
Gu.ti.AP3_4 RFDQIVALKVKTISSITSIRERKFHVIKNQIGTTHKVVKNLEEIQRNLLLD---LEAKCE [146]
Gu.ti.AP3_5 RFDQIVALIVKAISSITSIRERKFHVIKTQTHTRKVVKNLEEIQRNLLLD---LEAKCE [146]
HmAP3 SWKDLRGLEQEMDSSVKIIRERKYRVLGNQIDTTRKVVKNLEEIHRVYIHE---FEVKEE [148]
HmTM6 NLNELRDLEQKSAASTAVIRERKYHVLKTQTTTCRKKVVRNLEERYGNLFLD---WEGKCE [148]
HPDEF1 GFEEKLLDLEKESQEAVYIIRERKLVIGNKLETSSKVVRSQDVYKMLMHE---FGIRGE [173]
HPDEF2 GFEEKLLDLEKESQEAVYIIRERKLVIGNKLETSSKVVRSQDVYKMLMHE---FGIRGE [173]
JrAP3 NLEELYHLEQNVE SAVKVIDRKYHVIGKKTDLKVKKRAESIHKVLLHE---LVARDE [163]
TAP3 NYEQLEELMENVDNSLKLIRERKFKVIGNQIETRYKVVVRNVEEINRNLLE---FDARQE [148]
TM6 NLQELCHLQENITESVAEIRERKYHVIKNQTDTCRKKVKNLEEQNGTLVLD---LEAKCE [170]
MASAKO_B3 SYAELQDLEETMSQSVQIIRDRKYHVLKTAETTRKVVKNLEERNNSLMHGYG--APGNE [174]
MdMADS13 SFDELASLDDEMSSSLDAIRQRKYHVIKTQTTTCKKVVKNLEEQRRGNMLHGYFDQEAAGE [176]
MdtM6 SYDDLRSLEDKMQSSSLDAIRERKYHVIKTQTTTCKKVVKNLEEQRRGNMLHG---YEAASE [173]
NMH7 SMEELRLLLEDEMDKALKAIRERKYKVIITNQIDTQRKFFNNEVEVDNRLLRD---LDARAE [173]
NTDEF NYEQLEELNENVDNSLKLIRERKYKVIIGNQIDTYKVVVRNVEEIHRLNLLLE---FDARQE [173]
NTTM6 NLQELCRLQENISESVAEIRERKYHVIKTQTDTCRKKVKNLEEQHGSLVLD---LEAKSE [133]
PcAP3 TFEELRSLEANLLSSVEIVRLRKFHVLGSHTTETSKKRNKAMEETHKNLLRATYSQADRDE [167]
PhDEF NYEQLEELMENVDNSLKLIRERKYKVIIGNQIETFFKVVVRNVEEIHRLNLLLE---FDARQE [173]
PhTM6 NLQELCHLQGNVSDSLAEIRERKYHVIKTQTDTCRKRVRNLEEQHGSLVLD---LEAKSE [173]
PnAP3_1 SLDEMIRILEKNLIDSADIVNRNKNVHNSHTTETSKKRNKAEETYNKLVRLALHSQADREE [152]
PnAP3_2 TIEELRLEQNLEASVKKVDRKYHVITQTTTTRKLLRNHTEQNHGLLREFEPI--LDE [176]
PtAP3_1 RLDELRLGLEQNMEECLKNIRDRKEHQLRNQIGTSKKTTRNAEEINRKLIRR---LDGMDD [148]
PtAP3_2 RLEELRGLEQNIQESLMIVGDRKEHQLRNQIGTYKKTTRNAEEINRKLIRR---LDGIDD [148]
PTD NLNELRDLEQKSAASTAVIRERKYHVLKTQTTTCRKKVVRNLEERYGNLFLD---WEGKCE [148]
RAD1 SYQELVFLQQDMENAVTNLSERKYKVLNSQIETGKVVVRNVEEIRQNLQMA---YDALRE [173]
RAD2 SFRELVLQQDMQDSVAKISERKYKAIANQIETTRKVVVRNVEEIRHSLVHA---FGALNL [173]
RbAP3_1 GIHELRSLEQDLRNSAKVVRLRKFGLLSSQGETQKVKIKNLAGINGSWQY---QERV [147]
RbAP3_2 SFAELRGLEQNMHSSVERVRHRKEHVIRTQTDTTNKKIKSHEETQRTLLAEYDVMKD--A [150]
Ri.sa.AP3_1 SLAELRNLEEMDGTLDIILERKRRVIGNQIDTLKVVVRNVEEIVNRKLVHE---FDVRCE [148]
Ri.sa.AP3_2 SLAELRNLEEMDGSVDIIRERKRRVIGNQIDTLRKKVVVRNVEEIVNRKLVHE---FDVRSE [148]

SLM3 SFEELCRLGQEMQEAVTLIRERKYYKKIDNQIDTTKKKVRNGQEVHKGLLQE---FEIPKD [175]
 STDEF NFEQLEELMENVDNSLKLIRERKYYKVIQNIETIRKKVRNVVEIHRNLLLE---FDARQE [173]

AP3 DPHYGLV----- [180]
 DeAP3 D----- [147]
 DEF DPHFGLVD----- [181]
 GDEF1 ----- [171]
 GDEF2 DPQYGM----- [180]
 Gu.ti.AP3_4 D----- [147]
 Gu.ti.AP3_5 DPQYGMV----- [153]
 HmAP3 DPHYGLVDNNGN-YD----- [162]
 HmTM6 DPQYGLVE----- [156]
 HPDEF1 DPQFGMIEDGEYD----- [186]
 HPDEF2 DPQFGMIEDGEYDAVYGY----- [192]
 JrAP3 DP-YGLVDNNGG----- [174]
 TAP3 DPYGGGLVEHDG----- [159]
 TM6 DPKYGVVENEGH ----- [182]
 MASAKO_B3 DPQYGYVDNEGDIYESAVALANGASNLYFFNRVHNNHNLHDHGH----- [216]
 MdMADS13 DPQYGYEDNEGD----- [188]
 MdTM6 NPQYCYVDNEGDIYESALVLANGANNLYTFQL----- [204]
 NMH7 DPRFEMMDNGGE-YESVIGFSNLGPRMFALSL----- [204]
 NTDEF DPYGLVEQEG----- [183]
 NTTM6 DPKYGTVENEG----- [144]
 PcAP3 -EFLFYAIPADREGDHNRDYLSSSSSMRTLSINGG-DCENSQIT----- [209]
 PhDEF DPYGLVEQEGDYNV----- [189]
 PhTM6 DPTYGVVENEGHF----- [186]
 PnAP3_1 QEFHFYAIPADTEGDHHRDYLSSSSSMRRLSISGGGDCE----- [191]
 PnAP3_2 DPHYVIAHQEEDYESAIELAHGG----- [199]
 PtAP3_1_ DSQYGLEDDGVDDEPAIALTNGNSHIFAFRLHP----- [181]
 PtAP3_2 DSQYGLEDDGDDESAIALTNGNSHIFAFR----- [178]
 PTD DPQYGLVE----- [156]
 RAD1 DPHCGLVYNG----- [183]
 RAD2 N-----EYG----- [177]
 RbAP3_1 EEEYIAS---GMSELE----- [160]
 RbAP3_2 GSQYSFVQQD----- [160]
 Ri.sa.AP3_1 HPHFGLVDNNGRE----- [161]
 Ri.sa.AP3_2 DPHFGLVDNNGSEYDTVLEY----- [168]
 SLM3 EPPYGLVDNGDYSN----- [189]
 STDEF DPYGGGLV----- [180]