

## Supplementary sequences

### ABP1

>ABP1\_AT4G02980

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SHMTVAGSVLHGMKEVEIWLQTFAPGSETPIHRHSCEEVFVVLKGSGLTYLAETHGNFPG  
KPIEFPIFANSTIHIPINDAHQVKNKGHEDLQVLSRPPPIKIFIYEDWFMPTAARLK  
FPYYWDEQCQESQKDEL-

>Volca1|35798|gw1.13.76.1

AFVFDPTLGLSLSGVEVFEPGHHTPLHIHKAHELFFVLAGEGVAFCCNGRQFPVRAGDCVVFPPRAVH  
GIDNTSTGSKLYCLQLMTPNESFVEHVKSG

>Phypa1\_1|151546|e\_gw1.339.27.1

MSVVRNLTELQDSYGRPGLMHMTIAGAVHHGMKEME VWMQTFAPNSGTPIHRHECEEVITLKGHGTL  
LSRSRELDAPGEPPEFQIYPNATFTIPVDSVRNTNQGEDLQVVVTSRPPMKSFYIYKWEWSTPHAEA VYEP  
REWDKEDKLSSASQCKEPEAEDDMADIAKLLGRSIEDIVVSDEIR\*

>Selmo1|133599|e\_gw1.120.72.1

SLCFVSGILVVRNLS DIPQDSYGRPGLSHMTVAGAVHHGMKELEVWLQTFAPGSGTPIHRHDCEEIFLVL  
KGGKTLFLAEPGLEYPGEVQVQFHISGNSTMTIPVNSVHQIINTSNEDLQFYVIISRPPVIRVVFYRSFLVP  
HTEAVTHFPYPWDLKTLTS\*

>Chlre3|190281|estExt\_fgenesh2\_pg.C\_180050

MRTSWLAILALALGALVAAEAKCVVKPRKAVVDIAGIKNYTGPGSSITILHVDAWDGDDAFLSAYLTMP  
PGAVFIHRHLDLDFSEHVLVTRGVGSWEYWPLDAPKPVADPIKAGSSVYMAPNVLHRIVNTSPTETLEIMI  
TAAPGRNTVQEAYEDWPDSTAAAGHPIELPWHTDCPPGQELKQEL\*

>ChlNC64A\_1|17596|gw1.3.774.1

PVKYHIDELYQSNHGRSGLAHITVAGAAHHGMRKIEMWLQTFAPGVQTPVHRHACEE VFIQRGAGTAF  
RAPDGGVQVAFQNDTLILPDMVHQVNTGQEDLQALVVIDSPPIRIFTYSDWSIADVQAQLQPPYYW  
DRAC

>ChlNC64A\_1|26559|e\_gw1.21.185.1

MRTFEVQQTAFPGAATPIHEHACNEVFLVMRGEGETAFIRDKASGASAGSHQSTFNILPGARHQLVNTGA  
EDFQALVVTDNPPFRVGA\*

>MicpuC2|54191|EuGene.0000170037

MSRELMFENDHAICWKTTITPNAPLKMHRHADRARCIVGLKGGVLLKTEEDGRVSNLVFETGKAYWLPKDP  
PNELHADVNEGEDDVVIVITELKEEADRDTAEFGAKREPFAGLKMPKGWEPPTTKRDE\*

>MicpuN2|76900|gw2.08.745.1

WTWERIQEMYKQDGGSFKGCSEFELGKRGESTVFHVRYFEVDPGGWTLEHHRHEHAVIGLRGKGEIQ  
LGPHVYPVHVGDAAAYTAPGDTHQLRNHGDEPFQFICVVAADRDRP

>OrysaABP1.1al

MVEVCLQTFPGQRTPIHRHSCEEVFVVLKGGKTLFLGSSSMKYPGQPQEIPVFQNSTFT  
IPVNDPHQVWNSDEHEDLQVIVVISRPPKVFYDDWNMPHTAAKLQFPIFWDEELIAP  
KDEL\*

>OrysaABP1.2al

METRGTPTAAGGHGAHLGAGRGALLLALVVVSAAFPLVAESSCPDNLVVDVSKMYQ  
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SSSMKYPGQPQEIPVFQNSTFVVPVNDPHQVWNSDEHEDLQVLSRPPVKIFTYDDWS  
VPHTAAKLKFPYFWDEDCLPAPKDEL\*

>OrysaABP1.2.al

METRGTPTAAGGHGAHLGAGRGALLLALVVVSAAFPLVAESSCPDNLVVDVSKMYQ  
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SSSMKYPGQPQEIPVFQNSTFVVPVNDPHQVVERMIVVILFTECETS\*

>Osta4|37601|1800010005

MSREFQFENEEAICWKTTVTPNLPLKMHRHADRARVIVALQGGVLLKRVDEDEDGSTRDLVFETGKAYWYEADP  
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>PoptrABP1.1al

GLPLVRNISELPQDNYGRGGLSHITLAGSAMHGLKEVEVWLQTFSPGSRTPPIHRHSCEEIFVVLKGSGL  
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KLKFPYYWDEQC

>PoptrABP1.2al

VEIWLQTCSPGAVTXIHRHSCEEVSVVMKESGLCISSNSQEKYPGKREFYFFFANSTFHILVDDAYQI

WNIDEHEAMQALAITSPHHSKFIYEDWLKPRTA AKL KLLIFWDDQCLQAPPKDEL

>GLP1\_AT1G72610

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TFNSANPGLQILDALFANSLPTLVVGTTFDLATTVKKLGVLGGTG

>Ost9901\_3|28211|eugene.1700010004

MSREFMFENEFaicwKTTVLPNVPLKMRHRDRARTIVALQGGVVKRIDEDGSRKDLVFETGKAYWYDADP  
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TSA\*

## AM11

>AM11\_AT1G08980

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PASYCGIFGRFPRSHGAVSTVGLTMAQSFDTVGWFFARDTATLKRVCVLLQQHHLNPIEPSQLIADDC  
KLCSPVHLLVQPLVGSVEKSFSGGNTVVKKVNLGEYIQNVPSLKHFMSTDDVTTQEFQIPSLMALSS  
MRLLRHEFKINHGAWISSVKPEFGPGISERIEEAIRTSDEKIDHCRSVKSELITALSTLLGEKGVLVIP  
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LAAFI-

>TOC64-III\_AT3G17970

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KSSYGAINSTGIIPVSSSLDSVGFARDPNTLRRVGHVLLQLPFATQRNPRQIILADDC  
QLLKIPVDRLITQVVTKSAEKLFRQLLKHQNLETYFETKVPVSLKEFARTKAIANTKVSTS  
RLLANVMQLQRHEFLQNHGDWINTVKPAIDPVLSQVCENPELTNEETENLNAIRNETR  
VAIGSLLKDDGILVIPTLPAVPPKLGSKETSEDYQNRASLLSIASISGCCQVTVPLGH  
HEKCPISVDFGRHGGDRFLDVTQTMYPVSLQYSSIVTDPKSSKAITKEESAIEAKE  
GNQAFKEKLWQKAIGLYSEAIKLSNNTATYYSNRAAAYLELGGFLQAEEDCTKAITLDDK  
NVKAYLRRGTAREMLGDCKGAIEDFRYALVLEPNNKRASLSAERLRKFQ-

>AT5G07360

MARPSIATCDPSARPCLATRGSLPRSRTCAPLLFLCLLLGLTVFCADANPSDSKLLCSRL  
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DSAFFNETKLEIAKGATEMNVPIYRANKLVATKNGGLENPSLVFNPSWNREVQRVQD  
KRFKYPSASGVKLPREDEIDAFMSVLELDELIKTRQITSKELVRIYKQLKRYNHVLEAV  
VYTEELAYKQAKEADDDLSQGTYLGPLHGIPYGLKDIAVAVPGYKTTWGSTSFKDQFLDI  
EAWVYKRLKASGAVLVAKLVTSMA YDDIWFGRTRNPWNIEEFSTGSSAGPAASTSAGM  
VPFAIGSETAGSMTYPAARCGITALRPTFGSVGRTGVMSISESLDKLGPFCRTAADCAVI  
LDAIKGKDPDDLSSREIAFEDPFSVDITKLVGYTKDADMKVVEVLGSKGVNMVPELNY  
TVESVQGILNFTMDVDMLAHFDEWQRTGQEDLYEAQDQWPVELRRARVVTAVDYIQARA  
RGKLRIVEVKSFTVDAFIGNVTDWEKVCMGNLVGLPVLVIPTGFKNITDPPTNSCRRRTT  
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>TOC64-V\_AT5G09420.1

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VGKTIMDELGFGIIGENKHYGTIPNPLMPDNVPGGSSSGSAVSVGAELVDFSLGIDTTGG  
VRVPAAFCGILGFRPSQGTVSSVGVLPNSQSLQLETVGWFFASDPVLCQVGHALLNLSAVTH  
RRQRSIFADDLFELSDIPKQKSVQVVRKAIENLSGYKTPKHVNQVGYVASNVPSLAEF  
EQSGKSQNSASTLRALSSVMLAIQRHEFKTNHEEWQTKSFLGPRFNSDVVTALKSKNE  
SIKSLYRVKNEMRATIQSLLKEDGILVIPTVADPPRLNTRKNSLNEFLDRTYALS CIA  
SMSCGCCQVTIPLGEHGRPISVLLTYGGDKFLDITLTVYASLQDQAKLASNLAPVSD  
TNGNMEASEVMKEKGNAAKQKQWNAVNIFYTEAIKNGANATYYCNRAAAFLELCCFFQ  
AEQDCTKAMLIDKKNV KAYLRRGTARESLVRYKEAAADFRHALVLEPQNKTA VAEKRLR  
KHI-

>ChlNC64A\_1\_35982\_estExt\_Genewise1Plus.C\_130278

MISQRLLVRGAKAVTGDRHPLPFLSAHLAVRSSSSHPGRGGVVRGMATHAELHSQGCYIGEVHVVGAPS  
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HYGTPANPAAPGRIPGGSSSGTAAVAAGDADLGLGGDTGGSVRVPACHCGILGIRPTHGRVSLQGA VPL  
APSFDTGGWFARDAGVLRVAVGGVLLDGGSSRRPAQLRRLVAADAFGLAEAEATTKALYDALSPKIDQVAAL  
LSKPQAEVGSSTVGLSQA WFNFRVHQAEHIVQQHGA WVTHEHPNFGPGRIRERFQMAEGVSRKQYEEAA  
QQRGAARQLAELLGGDGLMLPTAPAPAPLNTPSDQLDAFRSTLISLTCIAGLSGFPQVNVPIADVEG  
LPVGLGLIGPPGSDLEDLELLEQLLAVLR\*

>ChlNC64A\_1\_9137\_gw1.10.80.1

GPLAGLAFAAKDSYNAVYATGLGNPSWARDHPPAKTTAPARKSPRCLQALLDAGANLAGKAAMSELAYD  
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EGSVPLAPSFDTAGWFARDAELLSAVGKTLLAGSAPGPAVDSWNLVTATTPARVACCLLAGACGESELCFL

PHLLAAATYQCCWPLPLPLALQSKEVNEVLGPVWSGPTKPAVSAGIAQRLKAASLVSKQAAAAARQQADA  
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VSIIGPRGSDEALLALAERLAAA

>Chlre3\_106270\_e\_gwH.41.66.1  
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FGIRPTWGRNLEGARPLAPSFDTAGWFARDAATLRAAGSVLLDPASRAPGSPRLTRWLVARDAFGLADP  
PTEKAIYDAMSADFSKVGSQAQRSTDAPLPIGWWRNTATNTLPGFEVWREHGAWVTEHNPAPFGPGIKDRFI  
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XNMTEFAFSGVGINPHFGTPVNPASADGIARIPGGSSSGAAVSVVALGLAVAAALGSDTGGSSIRIPAALCGL  
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DPVVARAFDRALGRLSAAGVQLEHTDLPDLAELPGLNAAGGFSAAEAFSIHRHTLATRRNMYDPRVALRI  
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FNFLDGGISLPCHPAD

>Chlvu1\_29761\_e\_gw1.9.140.1  
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CGAWGIRPTHGRVSLLEGACTLAASYDTGGFFARNAELLRRAGDVLLDPATRSVDVQFKRWLVAKDAFDLAD  
DATSEAIRVGLIDL VFLDSYHRFSLPVACTTKTASCSEGFELACCVFRVSQGAEVWEALGEWVQSAQPQ  
LPGTKERFEMASQLTLDTEVRCSSHLMNTENLHLEQLLGEDGVLA VPSAPGPAPFLNTPQQDLDFRKRRI  
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>MicpuC2\_45582\_estExt\_fgenesh1\_pm.C\_60007  
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HRTGCGNPDWLRTRGGTPAATHAPCVAAMLDAAGATCVGKTQMDLAWSLQGENAHYGTSPNPADPSRVPG  
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LMACGAALLPPDRPSGTIHADGFKRLIVATDAFATCDAGTREALISAIERAAKAGGDLEPAWWSDFRTLQ  
TREVWLEHGA WIEETDPSFGPGV AERFAAAEAGGGAATDAIAAANAARDAITRRLNAMLEGGGVIVLPSA  
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LALTVSLERLAF\*

>MicpuN2\_68791\_gw2.03.307.1  
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RGCVPLAPSFVVGWFARDAATMLRCGSVLLPPWGWADTAFDLRFDGAIARDAFELCDEETRATLREAVA  
RACGPGLGEAGGTVEVDVGGGGSTPPLTEWVNVFRVIQANEVWRAHGAWVSEHQPRFGPGVVERFEGA  
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VIAATATALIPLPKDQISVSRVMVLEDAIDLCDDIASCGVATACMLLKDAFKNGGISRLNLGKHLMLMACP  
SLREMQNKDCA TGLDVLNRCLRLIEGEEVWSQIGGWYSAEKPETGAKAKEYLLGASKIATDSLVRVIKQAR  
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>Ost9901\_3\_17396\_fgenesh1\_pg.C\_Chr\_11000198  
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MVRVLMGAEIWENL GKWYTEEKPKLGAAVKARMEAA SKLDAEVERLKEVREEVREVDRLDGGAFIL  
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RQIVPALVEAYPDILEAELERLNPPEAPGESEKTKGNEALKQGGKYQDAIEYYSVAIGKNPKSKIFVANRA  
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>Osta4\_12917\_fgenesh1\_pg.C\_Chr\_11.0001000182  
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VSMRGVQALAPSFDTVGWFARSIDLRRVGDVLLPSADEHAPT KPSAWYLLEDVSDKRSSPHQAQCAAVA  
AVALNEIDRGGKFRMRNLTEHLLVGC PKFQALVGRRECDLCLREVLRVTMGAEIWENLGPWKKEQP  
LDPAVEGRLEAAAKLSPTQVELFKEIREEVRETMDRLLDNGVVVLVPTTPGKAPERGLGEKATEEWRKCC  
FELTCIASL CGLPQVSIPLAPNVEGPQGLSLIGGYQTDRLMLMDAARDLVVELVDA YPDILEAELLRLNP  
PREPGDAEKAKGNEALKKGGKYQDAIEY YGVAIGKNPKNPVYVANRAMAHLKLGNYELCEDDCTTAIKLDR  
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>Osta4\_33211\_0600010058

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GTDITIGSVRLPASFCGVYGARPTHGRVDATGVVPLSHSFDTVGWFTKDAKTLRVMGEILLDPETRAETS  
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VLPITWESETFRVIQTREVDWAHGGWIKHEKPVFGPGRDRFRAAEIGVDAATMDHVALRERITNHL  
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>Volca1\_87871\_fgenes4\_pg.C\_scaffold\_700027\_AMI1

MRSTQLYASGSDPSDPYNAYIDKSLTVKGPADGPKGLAFVAKDLFDALLDAGATLRGKTHMDELAYSLN  
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>Volca1\_116484\_fgenes5\_synt.7\_13

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VEVAAPLSGEGLTGFVDWMGVFRGFVWQEHAAVWSAHNPEFGPGIKERFAMAAAVTKEQHEVGSARRR  
IRSHLLELLGSDGLLVPTTPGPAPPVNTPPADLDAWRTRLISLTSIAGLAGLPQVSLPIARVDGLPVG  
GLIGPPGSDEALLEITEHLMGVIAQPLQ\*

>Phypa1\_1\_197643\_estExt\_gwp\_gw1.C\_3010032

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LQRIKDEARYAINDLLKDDMLLVLPVDPDIPPKLNTKPESELEEFNRAMDLICIAMSGCCQVTPAGEH  
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>Phypa1\_1\_140463\_e\_gw1.167.37.1\_TOCs

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SRDVHVLHQVYVKLLQPPDLERGLPSSVLVADDFSSQSSISTVRTADLIARAVSETLGRSLVHHVNLGAL  
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MAPYIDGLHKMALKIKEETRAAMNEILLMDSLLVMPSTPSLPPLKEAKGKELEIFESRALSMLSASMSG  
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>Phypa1\_1\_142465\_e\_gw1.192.61.1\_TOC

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AGLLRLVGRQLCPHVMDGKGPGRFYMAHDVFKLSAVSHLRTADVLRARSVQRTVGRHTLCNLNFIEYLED  
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DSEALRVIAIQVREEISSLMNLLKA\*

>Phypa1\_1\_133073\_e\_gw1.100.1.1\_TOCs

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IASNVPTLRNLFMEERLLKQDTSRYSTYDGLRDAMILLREEFKHRKWFEDVNPELAPDVDVRVKFA  
MAPHLDGLHRLALKVKDETRAAMNELLTDTLLVIPSTPSLPSSKAAARGKELEFFESRALSILSIASMSG  
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>Selmo1\_42040\_gw1.81.189.1\_TOCs

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## AUX1/LAXs

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## AUX/IAAs

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## IGPS

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## PINs

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## **ST5A**

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## TSA1

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## **TSBs**

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## TTGs

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>Selmo1\_127526\_e\_gw1.87.93.1

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>Selmo1\_127915\_e\_gw1.88.129.1

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>Selmo1\_128032\_e\_gw1.88.124.1

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>Selmo1\_128107\_e\_gw1.88.128.1

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>Selmo1\_131108\_e\_gw1.105.22.1

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>Selmo1\_133674\_e\_gw1.120.12.1

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>Selmo1\_134299\_e\_gw1.124.18.1

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>Selmo1\_134899\_e\_gw1.130.100.1

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>Selmo1\_143651\_estExt\_Genewise1.C\_61172

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>Selmo1\_144881\_estExt\_Genewise1.C\_90084

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VLSHPAIGALVSHCGWSSVVECILLAGVPILAWPFLGDQLPTCRHLVDEYKIAVDIGVDGVPSADDDVERG  
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>Selmo1\_144884\_estExt\_Genewise1.C\_90087

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>Selmo1\_152941\_estExt\_Genewise1.C\_390153

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>Selmo1\_153665\_estExt\_Genewise1.C\_430203  
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>Selmo1\_154272\_estExt\_Genewise1.C\_470214  
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CGWNSTLESLSGVPIMGWPFMGDQPINCKFMVDVVRVGVRIESKNSSDGSSRIVGRSEVERAARSLMGS  
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>Selmo1\_157053\_estExt\_Genewise1.C\_650239  
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>Selmo1\_160724\_estExt\_Genewise1.C\_1050141  
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>Selmo1\_162354\_estExt\_Genewise1.C\_1360045  
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>Selmo1\_165329\_estExt\_Genewise1Plus.C\_20092  
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>Selmo1\_167957\_estExt\_Genewise1Plus.C\_61157  
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ERRSRIFSRNKEAACIFLNTVEELERKVVAAIQELLRPKFLTIGPLLPSSFLSDHPADENTVSAEGVWK  
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>Selmo1\_168007\_estExt\_Genewise1Plus.C\_61333  
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FIPGHVPANADPNPDALIDFIPGLEPFTRELLPLAFQHGQPVTTVGVAAARRTKDAVCIVVNTIEELDQE  
VVNNGRRLLFSSYLPVGPLVPAELLQEHPITLSSPNDTSMIWLKQAYRSVLYIAFGSVVTLPADQVEKI  
ARAVKATRQPVLWAIIRNFADKDPENFYESLQEIQVGAQACLVEVWAPQVNVLRHSAVGAFLMHGGWNSAL  
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>Selmo1\_173967\_estExt\_Genewise1Plus.C\_240005  
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LLLCFHLPLLKHLPAKGRKDIIDFMPGLPSFCASHLPSTLQHEDECDPGFELRIQRFERMKDDVWVFN  
SFQEMEAAPLDAARDVNPNCIAVGPLHFDDTGEETQLSMSPWIEDTSCLEWLDKQAPSSVYVVSFGSVAT

ISYSDAQVYEGLANSGHAFLWVIRLDLLQGSDEQARNDFSARIQQNEKGLIISWAPQVKVLEHESV GAL  
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>Selmo1\_177347\_estExt\_Genewise1Plus.C\_390229

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LSRGGLESSKQAFWLWAFRPGCVGLEIEELESFKERTSSTGLVISWAPQVEVLSHESTGGFLTHCGWNSVL  
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>Selmo1\_177943\_estExt\_Genewise1Plus.C\_420428

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QLRVLKHPISIAAHLSHCGWNSVLESISNGVPLMCWPGAEQNTNAKLVIHDWKIGAGFARGANGLIGRGD  
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>Selmo1\_178031\_estExt\_Genewise1Plus.C\_430193

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PQLRVLKHPISIAAHLSHCGWNSVLESISNGVPLMCWPGAEQNTNAKLVIHDWKIGAGFARGANGLIGRGD  
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>Selmo1\_179380\_estExt\_Genewise1Plus.C\_520303

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>Selmo1\_183183\_estExt\_Genewise1Plus.C\_810253

MGSLSKFQVVLIPVPAQGHVVPPIYLARKLALLGVTVTIINVDLSIHETLQSSWKSEDNPVSNHDIRLES  
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>Selmo1\_186767\_estExt\_Genewise1Plus.C\_1360046

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NPGSVLYISFGSIAVLSVEQFEELAGALEASKKPFLLVIRPELVVGGHSNESYNGFCERTKNQGFIVSWA  
PQLRVLAHPSMGAFLLTHCGWNSVQESIANGIPMLGWPGYGGDQITNSKFVVEDWKIGVRFCKTVVQGLIGREE  
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>Selmo1\_22903\_gw1.47.194.1

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## YUCs

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GL\*