

S4 Table. Protein sequences used for construction of phylogenetic tree

> *T. aestivum* CRT1
-----MAIR-RGSSCAVLAL---LALASVAAVSADVFFQEK---FEDGWESRWVKSEWKK
DENM-AGEWNHTSGKWHGDAE-DKGIQTSEDYRFYAISAEYPEFSNKDKTLVLQFTVKHE
QKLDCCGGYVLLGGDQKKFVGGDTPYSIMFGPDICGYSTKKVHTILTKDGKNHLIKKD
VPCETDQLSHVYTLIIRPDATYSILIDNEEKQTGSIYEHWDILPPKEIKDPEAKKPEDWD
DKEYIPDPEDVKPEGYDDIPKEVTDPAKKPEDWDDEEDGEWTAPTIPNPEYKGPWKQKK
IKNPNYQGWKAPMIANPDFKDDPYIYAFDSLKYIGIELWQVKSGLTFDNILITDDAALA
KTFAEETWAKHKEAEKAAFDAAEK-KKEEDASKASED-DDDLDEEADDED-KDDKAGS
DAE-----SDDEK-HDEL

> *T. aestivum* CRT2
-----MAVLARSAAVAALA-----LLASAVAGEVFFQEK---FDDGWEDRWVKSEWKK
EDNT-AGEWNHTSGKWNADAD-DKGIQTSEDYRFYAISAQYPEFSNKDKTLVLQFSVKHE
QDLDCGGYVLLPADVDQKKFVGGDTPYSIMFGPDICGYATKKVHAILTKNGKNHLIKKE
VPCETDQLTHVYTLILRPDATYSILIDNVEKQSGSVYDDWDILPAKKRDPNAKKPEDWE
DEEFLPDPEKPEGYDDIPKEITEPDATKPEDWDDEEDGEWTAPTIPNPEYKGPWIQKK
IKNPNFKGKWKAPLIDNPEFKDDPYIYAFDSLKHIGIELWQVKSGLTFDNILITDDPEYA
KKFAEETWKGKHKDAEKAADFDEAEK-KRLEESANAKTEDNDDAADEDEGKAAGASDEENK
DASGDEKVEEISKDASSSSDK-KDEL

> *T. aestivum* CRT3-1
-MGSSRRRGRD--H-LKLLHRLALSSLLLLASGEVIFEER---FEDGWETRWWKSDWKK
SEGK-AGMFKHTAGKYSGDPD-DKGIQTTIDARHFAISAKIPEFSNKGRTLTVVQYSIKFE
QEIECGGGYIKLTSYVNVQKKYSGDTPYSIMFGPDICGTQTKLHLILSYQGQNYPIKDK
LQCETDRLTHVYTFILRPDASYSLVDNRERESGSMYTDWDILPPRKIKDVGAKKPKDWD
DREYIEDPDAVKPEGYDSIPREIPDPKDKKPDWDDDDGGIWKPRRIIPNPAYKGPWKRRK
IKNPNYKWKWIPWIDNPEFEDDPDLYVLKPLKYIGIEVWQVKSGLTFDNILICDDPEYA
KQVADETWGANKEAEKEAFKEAEKERKAREDKAEQQAREEGERRRRERGRHRGRDHYKD
RYKRRNRDHWDD-----YHDEL

> *T. aestivum* CRT3
MMGSSRRRGRDQLQ-FQLLHRLALSSLLLLASGEVIFEER---FEDGWETRWWKSDWKK
SEGK-AGMFKHTAGKYSGDPD-DKGIQTTIDARHFAISAKIPEFSNKGRTLTVVQYSIKFE
QKIECGGGYVLLMSGYVNVQKKYSGDTPYSIMFGPDICGTQTKLHLILSYQGQNYPIKDK
LQCETDRLTHVYTFILRPDASYSLVDNRERESGSMYTDWDILPPRKIKDAGAKKPRDWD
DPEYIEDPDAVKPEGYDSIPKEIPDPKDKKPDWDDDDGGIWKPRRIIPNPAYKGPWKRRK
IKNPNYKWKWIPWIDNPEFEDDPDLYVLKPLKYIGIEVWQVKSGLTFDNILICDDPEYA
KQVADETWGANKEAEKEAFEEAEKERKAREDKAEQQAREEGERRRRERGRHRGRDHYKD
RYKRRNRDHWDD-----YHDEL

> *N. plumbaginifolia* Crt
--MATQRRANPSSLHLITVFSL-----LVAVVSAEVFFFEES---FNDGWESRWVKSEWKK
DENM-AGEWNHTSGKWNADAN-DKGIQTSEDYRFYAISAEFPEFSNKGKLVFQFSVKHE
QKLDCCGGYMKLLSGDQKKFVGGDTPYSIMFGPDICGYSTKKVHAILTYNDTNHLIKKE
VPCETDQLTHVYTFILRPDATYSILIDNVEKQSGSLYSDWDLPPKTIKDPKAKKPEDWD
EKEFIDDPEDKPEGYDDIPEEITDPDAKKPEDWDDEEDGEWTAPTIPNPEYKGPWKPKK
IKNPNYKWKWAPLIDNPDFKDDPDLYVFPKLYVGVELWQVKSGLTFDNIVICDDPEYA
KAIAEETWKGKQDAEKAFAEEAEK-KREESKAAPADSDAE-EDDDADDDSDAD--DK
SESKDDEAH-----DEL

> *A. thaliana* Crt3
-MGLPQNKLSFFCF-----FFLVSVLTLAPLAFSEIFLEEH---FEGGWKSRWVLSWKR
NEGK-AGTFKHTAGKWPDPD-NKGIQTYNDKHYAISAKIPEFSNKNRTLTVVQYSVKIE
QDIECGGAYIKLLSGYVNVQKQFVGGDTPYSIMFGPDICGTQTKLHVIVSYQGQNYPIKDK
LQCETDKLNHFYTFILRPDASYSLVDNKEREFSGSMYTDWDILPPRKIKVKNKAKKPEDWD
DREYIDDPNDVKPEGFDSIPREIPDRKAKEPEDWDEEENGLWEPPKIPNFAYKGPWKAKR
IKNPNYKWKWNPWIDNPEFEDDPDLYVLSIKYAGIEVWQVKSGLTFDNILICDDPAYA
RSIVDDYFAQHRESEKELFAEAEKERKAREDEEARIAREEGERRRERDHYK--GDRRRR
YKRPNPRDYMD-----YHDEL

> *M. truncatula* Crt3
---MAENAS-----TELKMFVLFCLLLIQVSLSEVIFEER---FEDGWRSRWVRSWKS

SE GK-AGSFKHTAGKWAGDPD-DKGIQTSNDAKHFAISAKIPEFSNKNRTL V FQYSIKFE
QEIECGGGMKLLSGFVNQKKFGGDPYPSV MFGPDL CGTDTK LHVIVSYQGQNY PVK KD
LQCETDKLTHFYTFILRPDATYSVLVDNRERDSGLYTDWDILPPRKIKDLKAKKPADWE
DREYIEDPNAVKPEGYDSIPAEIPDPKAKEPDSWDEDEDGIWKRPKIPNPAYKGPWKRKK
IKNPNYK GKWKTPWIDNPEFEDDPDLYVLKPIKYVGI EVWQVKGGSVFDNILICDDPEYA
KQVVDEVFAN-REIEKEAFEEAEKVRKAQEEEEEAQRAREDGERRRKERGYDRH-RDRHRD
RYRKHRRDYMDD-----YHDEL

> B. napus Crt
-----MAKLT--LASSPWFLS-----VSWRSLPPLLSSRNALMMDGRTDGLNQSGRKR
TSLLGSGATLLEIGLVMLTIK-VSRPARTDSTPSQLSSLN--SATRTKTLVCFQSVKHE
QKLDCCGGGMKLLSGDQKFKGGDPYPSIMFGPDI CGYSTKKVHAILTYNDANHLIKKD
VPCETDQLTHVYTFILRPDATYTILVDNVEKQTGSLYSDWDL LPPKKIKDPSAKKPEDWD
EQEYIPDPEDKKPDGYDDIPKEIPD TDAKKPEDWDEEEDGEWTAPTIPNPEYMG EWKPKQ
IKNPNYK GKWEAPEIDNPDFKDDPELYVFPK LKYVGI ELWQVKSGSLFDNVLICDDPDYA
KKLAEETWGK LKDAEKA AFDEIEK-KKEEEESKDAPAE T DGEDEAE EDEG--EESDTE SK
T-EAKSEVSEET---AEKDATAHDEL

> A. thaliana Crt2
-----MAKMIPSLVSLILIGL-----VAIASAAVIFEER---FDDGWENRWV KSEWKK
DDNT-AGEWKHTAGNWSGDAN-DKGIQTS EDRFYAISA EFP EFSNKDKTLV FQF SVKHE
QKLDCCGGGMKLLSGDQKFKGGDPYPSIMFGPDI CGYSTKKVHAILTYNGANHLIKKD
VPCETDQLTHVYTFILRPDATYSILIDNVEKQTGSLYSDWDL LPPKKIKDPSAKKPEDWD
EQEYISDPEDKKPDGYDDIPKEIPD TDSKKPEDWDEEEDGEWTAPTIPNPEYMG EWKPKQ
IKNPNYK GKWEAPLIDNPDFKDDPELYVFPK LKYVGL ELWQVKSGSLFDNVLICDDPDYA
KKLADETWGK LKDAEKA AFDEAEK-KNEEEESKDAPAE SDAE DEPEDEG-GDDSDSESK
AEETKSDSEET---SEKDATAHDEL

> B. vulgaris Crt
---MENRGRNPSFLSLLLLLS-----LFAIASAKVFFEER---FEDGW EKRWV KSEWKK
DESM-AGEWNYTSGKWN GDAN-DKGIQTS EDRFYAISA EFP EFSNKDNTLV FQF SVKHE
QKLDCCGGGMKLLSGEVDQKFKGGDPYPSIMFGPDI CGYSTKKVHAI FNYNDTNHLIKKD
VPCETDQLTHVYTFILRPDATYSILIDNQE KQTGSLYTDWDL LPAKKIKDPEAKKPEDWD
DKEFIPDPEDKKPEGYDDIPAEITDPEAKKPEDWDEEEDGEWTAPTIPNPEYKGPWKAKK
IKNPNYK GKWKAPMIDNPEFKDDPELYVYPK LRYVGL ELWQVKSGTLFDNVLV CDDPEYA
KQLAEETWGK QKDAEKA AFEELEK-KREEEETKDDPVESDAE-DEDEAEADDSKDDADK
SDDKDDQH-----DEL

> B. rapa Crt3
-MRLTQNK LKPFH-----LFLFSLLTLTPLAFSEIFFEEH---FEGGWKSRWV LSWDKR
NEGK-AGTFKHTAGKWPGDPD-NKGIQTYNDAKHYAISA KIQEFSNKNRTL VVQYSVKIE
QDIECGGAYIKLLSGYVNQKQFGGDPYPSLMFGPDI CGTQT K LHVILSYQGQNYPIK KD
LQCETDKL NHFYTFILRPDASYSVLVDNKEREF GSMYTDWDILPPRKIKVKNAKKPV DWD
DREYIDDPDVKPEGYDSIPREIRDQKAE EPD WDEEENGPWEAPKIPNPAYKGPWKAKK
IKNPNYK GKWKNPWIDNPEFEDDPDLYVLKPIKYIGIEVWQVKAGSIFDNILITDDPQYA
RAMVDDYFEQHRESEKELFAEAEKEREKAREEE-----

> G. max Crt1
---MAFRVRSPLRSLFLLS-----LLSIASANVFFEER---FDDGWENRWV KSDWKK
DENV-AGEWNHTSGQWNGDAN-DKGIQTS EDRFYAISA EY P EFSNKGKTLV FQF SVKHE
QKLDCCGGGMKLLSGDQKFKGGDPYPSIMFGPDI CGYSTKKVHAILTYNNTNHLIKKD
VPCETDQLTHVYTFILRPDATYSILIDNVEKQTGSLYSDWDL LPPKTIKDPEAKKPEDWD
DKEYIPDPEDKKPEGYDDIPKELPDPEAKKPEDWDEEEDGEWTPPTIANPEYKGPWKA EK
IKNPNYK GKWKAPLIDNPDFKDDPDLYVFPNLKYVGI ELWQVKSGTLFDNVLITDDPEYA
KQLVEETWGK HKDAEKA AFEEAEK-KREEEESKDDPVDSDADEEEDADEAGNDSDAESK
TEAGEDTKE-----EGVHDEL

> N. tabacum Crt
-----EVFFFEES---FNDGWESRWV KSEWKK
DENM-AGEWNHTSGKWN GDAN-DKGIQTS EDRFFAISA EFP EFSNKGKNLV FQF SVKHE
QKLDCCGGGMKLLSGDQKFKGGDPYPGIMFGPDI CGYSTKKVHAILTYNDTNHLIKKE
VPCETDQLTHVYTFILRPDATYSILIDNVEKQSGSLYSDWDL LPPKTIKDPSAKKPEDWD
EKEFIDDPEDKKPEGYDDIPEEITDPDAKKPEDWDDQEDGEWTAPTIPNPEYKGPWKPKK

IKNPNYKWKAPLIDNPDFKDDPDLYVFPNLKYVGVELWQVKSGLTFDNIVICDDPEYA
KAIAEETWKGKQDAEKAAFEEAEK-KREEESKAAPADSDAE-EDDDADDDADDAD--DK
LESKDDEAH-----DEL

> *A. thaliana* Crt1

-----MAKLNPKFISLILFAL-----VVIVSAEVIFEEK---FEDGWKRWVKS DWKK
DDNT-AGEWKHTAGNWSGDAN-DKGIQTSEDYRFYAISAEFPEFSNKDKTLVLFQFSVKHE
QKLDCCGGYMKLLSDDVDQTKFGGDTTPYSIMFGPDICGYSTKKVHAILTYNGTNHLIKKE
VPCETDQLTHVYTFVLRPDATYSILIDNVEKQTGSLYSDWDLPLPAKKIKDPSAKKPEDWD
DKEYIPDPEDTKPAGYDDIPKEIPDTDAKKPEDWDDEEDGEWTAPTIPNPEYNGEWKPKK
IKNPAYKWKAPMIDNPEFKDDPELYVFPKLYVGVELWQVKSGLTFDNVLSDDPEYA
KKLAEETWKGKQDAEKAAFDEAEK-KREEESKDAPAESDAEEEAEDDDNEGDDSDNESK
SEETKEAEETKE---AEETDAAHDEL

> *B. stolonifera* Crt

-----MAIAERRSRSHLALR-----VRDRVSAEVFFFEER---FEDGWESKWVKS DWKR
DENM-AGEWNFTSGKWNWDAN-DKGIQTSEDYRFYAISAAFPEFSNKDKTLVLFQFSVKHE
QKLDCCGGYMKLLSGDQKFKGGDTTPYSIMFGPDICGYSTKKVHAILTKGETNHLIKKD
VPCETDQLTHVYTFILRPDASYSILIDNVEKQSGSVYTDWDILPPKQIKDPEAKKPEDWE
DKEYIPDPEDKKPEGYDDIPKEITDPEAKKPEDWDDEEDGEWTAPTIPNPYKGEWKPKK
IKNPNFKGKWKAPMIDNPDFKDDPDIYVFPKLYVGIELWQVKSGLTFDNVLI CDDPDYA
KKLAEETWKGKQDAEKAAFDEAEK-KKEEEEAKDDPTESDDEKPDEEGESDGEDESKD
IDNEEDED-----VHDEL

> *H. vulgare* Crt2

-----LLRRLAL-----LALASVAAVAADVFFQEK---FEDGWESRWVKS EWKK
DENM-AGEWNHTSGKWHGDAE-DKGIQTSEDYRFYAISAEYPEFSNKDKTLVLFQFTVKHE
QKLDCCGGYVKKLLGGDQKFKGGDTTPYIMFGPDICGYSTKKVHTILTKNGKNHLIKKD
VPCETDQLSHVYTLIIRPDATYSILIDNEEKQTGSIYEHWDILPPKEIKDPEAKKPEDWD
DKEYIPDPEDVKPEGYDDIPKEVTDPAKKPEDWDDEEDGEWTAPTIPNPEYKGPWKQKK
IKNPNYQGWKAPMIANPDFQDDPYIYAFDSLKYIGIELWQVKSGLTFDNILITDDAALA
KTFAEETWAKHKDAEKAAFDEAEK-KKEEEDASKAGED-DDDLDEDEDADDED-KDDKAGS
DAEDDK-----DSDDEK-HDEL

> *H. vulgare* Crt1

-----RIGKKALESR---LVCASVAAVAADVFFQEK---FEDGWESRWVKS EWKK
DENM-AGEWNHTSGKWHGDAE-DKGIQTSEDYRFYAISAEYPEFSNKDKTLVLFQFTVKHE
QKLDCCGGYVKKLLGGDQKFKGGDTTPYIMFGPDICGYSTKKVHTILTKNGKNHLIKKD
VPCETDQLSHVYTLIIRPDATYSILIDNEEKQTGSIYEHWDILPPKEIKDPEAKKPEDWD
DKEYIPDPEDVKPEGYDDIPKEVTDPAKKPEDWDDEEDGEWTAPTIPNPEYKGPWKQKK
IKNPNYQGWKAPMIANPDFQDDPYIYAFDSLKYIGIELWQVKSGLTFDNILITDDAALA
KTFAEETWAKHKDAEKAAFDEAEK-KKEEEDASKAGED-DDDLDEDEDADDED-KDDKAGS
DAEDDK-----DSDDEK-HDEL

> *M. truncatula* Crt1

---MAIRVRNPNLLSLVLFSS-----LLSIASAKVFFFEER---FQDGWESRWVKS EWKK
DENL-AGEWNYTSGQWNGDAN-DKGIQTSEDYRFYAISAEFPEFSNKDNTLVLFQFSVKHE
QKLDCCGGYMKLLSGDQKFNFGGDTTPYSIMFGPDICGYSTKKVHAILTYNDTNHLIKKD
VPCETDQLTHVYTFIIRPDATYSILIDNVEKQTGSLYSDWSLLPPKIKDPEAKKPEDWD
DKEFIPDPEDKKPEGYDDIPKEVADPAKKPEDWDDEEDGEWTAPTIANPEYKGPWKPKK
IKNPNYSGWKAPLIDNPDFKDDPDIYVFPKLYVGIELWQVKSGLTFDNVVI TDDPEYA
KQVAEETWKGKQDAEKAAFEEAEK-KKEEETKDDPVSDAEDEEDANEVSHSDSDESK
AEAGEDSDET-----NKDDVHDEL

> *O. sativa* Crt1/2

-----MAIRARSSSYAAAVALALALASVAAVAGEVFFQEK---FEDGWESRWVKS EWKK
DENM-AGEWNHTSGKWNWDPE-DKGIQTSEDYRFYAISAEYPEFSNKDKTLVLFQFSVKHE
QKLDCCGGYVKKLLGGDQKFKGGDTTPYSIMFGPDICGYSTKKVHTIFTKNDKNHLIKKD
VPCETDQLSHVYTLIIHPDATYTILIDNVEKQSGSIYEHWDILPPKQIKDPEAKKPEDWD
DKEYIPDPEDKKPEGYDDIPKEIPDPDAKKPEDWDDEEDGEWTAPTIPNPEYKGPWKQKK
IKNPNYQGWKAPMIDNPDFKDDPYIYAFDSLKYIGIELWQVKSGLTFDNFLITDDPELA
KTFAEETWKGKQDAEKAAFDEAEK-KKEEAAA KAGED-DDDLDEDEDAEDEDKADKADKADS
DAEDGK-----DSDDEK-HDEL

> *O. sativa* Crt3

-MG--SRSGGR---HRLFLRFIALSSLLLIAAGEVIFEER---FEDGWESRWVKS DWKR
SEGK-AGTFKHTAGRYSGDPD-DKGIQTTL DARHFAISAKIPEFSNKGRTLVLQYSIKFE
QDIECGGGYIKLMSGYVNQKKFSGDTPYSIMFGPDI CGTQTKKLHLILSYQGQNYPIK KD
LQCETDKLTHVYTFILRPDASYSILVDNRERESGSMYTDWDILPPRKIKDVHAKKPKDWD
DREYIEDPDAVKPEGYDSIPKEIPDPKDKKPD TDWDDDDGIWKPRMIPNPAYKGPWKRKK
IKNPNYK GKWKIPWIDNPEFEDDPDLYVLKPLKYIGIEVWQVKAGSVFDNILICDDPEYA
RKA AEETWGANREAEKEAFEEAEK ERKAREDK EAERAREEGERRRRERGRDRHRGRD-YKD
RYKRRHRDHWD DD-----YHDEL

> P. armeniaca Crt

---MAFRVPNSSLLSLILLS-----LLAIASAKVFFFEER---FEDGWDKRWVTSEWKK
DENL-AGEWNYTSGKWN GDN-DKGIQTSEDYRFYAISAEFPEFSNKDKTLVLFQFSVKHE
QKLD CGGGYIKLLSGD V DQKKFGDTPYSIMFGPDI CGYSTKKVHAILNYNNTNLIK KD
VPCETDQLTHVYTFIIRPDATYSILIDNLEKQTGSLYSDWDL LPAKKIKDPEAKKPEDWE
DQEYIPDPEDKKPEGYDDIPKEITDPDAKKPEDWDDEEDGEWTAPTIPNPEYKGEWKPKK
IKNPNFKGKWKAPLIDNPEFKDDPELYVYPNLKYVGI ELWQVKS GTLFDNILITDEPEYA
KQLAEETWGKQKDAEKA AFEELEK-KLQEEESKEDPVSDAE DDDNEAEDGE-ESDSESK
PDSTEE SAET-----EAEKHDEL

> P. taeda Crt

-----MAGRRSLLYAVFLLL-----FVTLVSAEVFFFEER---FDDSWESRWVQSDWKK
DESL-AGDWWHTSGKWN GDN-DKGIQTHTDYRFFAISAAYPEFSNKDKTLVLFQFSVKHE
QKLD CGGGYV KLLSGEIDQKNFSGETPYSIMFGPDI CGYSTKKVHTILSYKG-KHPIK KD
VPCETDQLTHVYTFILRPDATYSILIDNTDKQSGSLYKDWDL LPPKTIKDPNAKKPEDWD
DKEYIPDPEDKKPEGYDDIPKEIPDPDATKPEDWNDEEDGEWTAPTIANPEYKGPWKPKK
IKNPNYK GKWKAPMIDNPDFKDDPELYVFPNLKYLGI ELWQVKS GTLFDNILISDDPEYA
KKLAEETWAKHKDAEKEAFDEAEK-KKEEEKEKESDDEEDTDEKEEKSDDEDAD ELDDE
HKEADKKEHELDSEHKEEDKKEHDEL

> R. communis Crt

-----MANPKSLSLFLLS-----LLAIASAEVFFFEER---FEDGWENRWVKS DWKK
DENT-AGEWNYTSGKWN GDN-DKGIQTSEDYRFYAISAEFPEFSNKDKTLVLFQFSVKHE
QKLD CGGGYMKLLSSSTDQKKFGDTPYSIMFGPDI CGYSTKKVHAILNYNNTNHLIK KE
VPCETDQLTHVYTLVIRPDATYSILIDNVEKQTGSLYTDWDL LPPKIKDPEAKKPEDWD
EKEYIPDPEDKKPEGYDDIPKEIPDPDAKKPEDWDDEEDGEWTAPTIANPEYKGPWKPKK
IKNPNYK GKWKAPMIDNPDFKDDPEIYVYPNLKYVGI ELWQVKS GTLFDNVLICNDPEYA
KQLAEETWGKNKDAEKA AFEEAEK-KKEEEESKDDPADSDADEDDDDADDT EGEDDGE SK
SDAAEDSAE-----DVHDEL

> V. vinifera Crt3

-MGFLSNSSGFSMDLKKLLLLPLLLSFLTLFSLSEVIFEER---FEDGWQSRWVKS DWKK
SEGK-AGSFKHTAGKWAGDPD-DKGIQTSTDARHFAISAKIPEFSNKNRTLVLQYSIRFE
QEIECGGGYIKLLSGFVNQKKFGDTPYSVMFGPDL CGTQTKKLHVIVSYQGQNYPIK KD
LQCETDKLTHVYTFILRPDASYSVLIDNRERESGSMYSDWDILPPRKIKDTKAKKPADWD
DREYIEDPNDVKPEGYDSIPAEIPDPKAKEPDNWD EEDGLWKPPKIPNPAFKGPWRRKK
IKNPNYK GKWKNQWIDNPEFEDDPDLYVLKPIKYVGI EVWQVKAGAIYDNILICDDPEYA
KQVVEEVFAH-RESEKEAFEEAEKVRKAREEEEAQRAREEGERRRRERGHDR--RYRDRE
RYRDRYRRVCIS-----YA---

> Z. mays Crt1

-----MAIR-KGSSYAVAAL---LALASVA AVAGEVFFQEK---FEDGWESRWVKS EWKK
DENM-AGEWNHTSGKWN GDAE-DKGIQTSEDYRFYAISAEYPEFSNKDKTLVLFQFSVKHE
QKLD CGGGYV KLLGGD V DQKKFGDTSYSIMFGPDI CGYSTKKVHTILTKDGKNHLIK KD
VPCETDQLTHVYTLIIRPDATYSILIDNEEKQTGSIYEHWDILPPKIKDPEAKKPEDWD
DKEYIPDPEDKKPEGYDDIPKEIPDPDAKKPEDWDDEEDGEWTAPTIPNPEYKGPWKQKK
IKNPNYQ GKWKAPMIDNPDFKDDPYIYAFDSLKYIGIE ELWQVKS GTLFDNIIITDDPALA
KTFAEETWGKHKEAEKA AFDEAEK-KKEEEDA AKGGDDEDDLEDEEDDEKA-DEDKADS
DAEDSK-----DSDDEKQHDEL

> Z. mays Crt2

-----MAIR-KGSSYAVAAL---LALASVA AVAGEVFFQEK---FEDGWESRWVKS EWKK
DENM-AGEWNHTSGKWN GDAE-DKGIQTSEDYRFYAISAEYPEFSNKDKTLVLFQFSVKHE
QKLD CGGGYV KLLGGD V DQKTLGGDTSYSIISRPDISRYSTKKVHTILTKDGKNHLIK KD
VPCQTDQLTHVYTFIIRPDATYSILIDNEEKHTGSIYEHWDILPPKIKDPEAKKPEDWD

DKEYIPDPEDKKPEGYDDIPKEIPDPDAKKPEDWDDEEDGEWTAPTIPNPEYKGPWKQKK
IKNPNYQGWKAPMIDNPDFKDDPYIYAFDSLKYIGIELWQVKSGLTFDNIITDDPALA
KTFAEETWGHKEAEKAAFDEAEK-KKEEEDAAGGDEDDLEDEEDDEKA-DEKADS
DAEDGK-----DSDDEK-HDEL

> *Z. mays* Crt3

-MGTGRRGGGG---GGVFHRLALSSLLLLASGEVVFEEER---FEDGWETRWVESDWKR
SEGK-AGRFKHTAGRYSADPD-DKGIQTTIDARHFAISAKFPEFSNKNRTLTVVQYSIKFE
QDIECGGGYIKLMSGYVNQKKFSGDTPYSLMFGPDICGTQTKKLHLILSYQGQNYPIKGD
LECETDKLTHVYTFILRPDASYSLLVDNRERESGSMYTDWDILPPRKIKDVHAKRPKDWD
DREYIEDPDEVKPEGYDSIPKQIPDPKDKKPDTWDEDEDGIWKPRMVSNPAYKGPWKRKR
IKNPNYKGWKTPWIDNPEFEDDPDLYVLKPLKYIGIEVWQVKSGLTFDNIITDDPALA
RKVVEETWGANREAEKEAFEEAEKERKAREGQKAKDDGGRHRIH-----
RHKKHYRDHWDD-----YHDEL

> *M. fuscata* Crt

-----MLLSVPLLLGLLG-----LAAAEPAVYFKEQ-FLDGDGWTSRWIESKHKS
DFGK---FVLSSGKFGYDDEEKDKGLQTSQDARFYALSASFEPFSNKGQTLVVQFTVKHE
QNIDCGGGYVKLFPNSLDQTMHGDSEYNIMFGPDICGPGTKKVHVI FNYKGNVLINKD
IRCKDDEFTHLYTLIVRPDNTYEVKIDNSQVESGSLEDDWDFLPPKKIKDPDASKPEDWD
ERAKIDDPDTSKPEDWD-KPEHIPDPDAKKPEDWDEEMDGEWEPPVIQNPEYKGEWKPRQ
IDNPDYKGTWIIHPEIDNPEYSPDPSIYAYDNFVGLGLDLWQVKSGLTFDNIITDDPALA
EEFGNETWGVTKVSPGPDDEEQRL--KEEEDDKRKEEEEAEDKEDDEDKDEDEEEDK
EEDEEEDVPG-----QAKDEL