

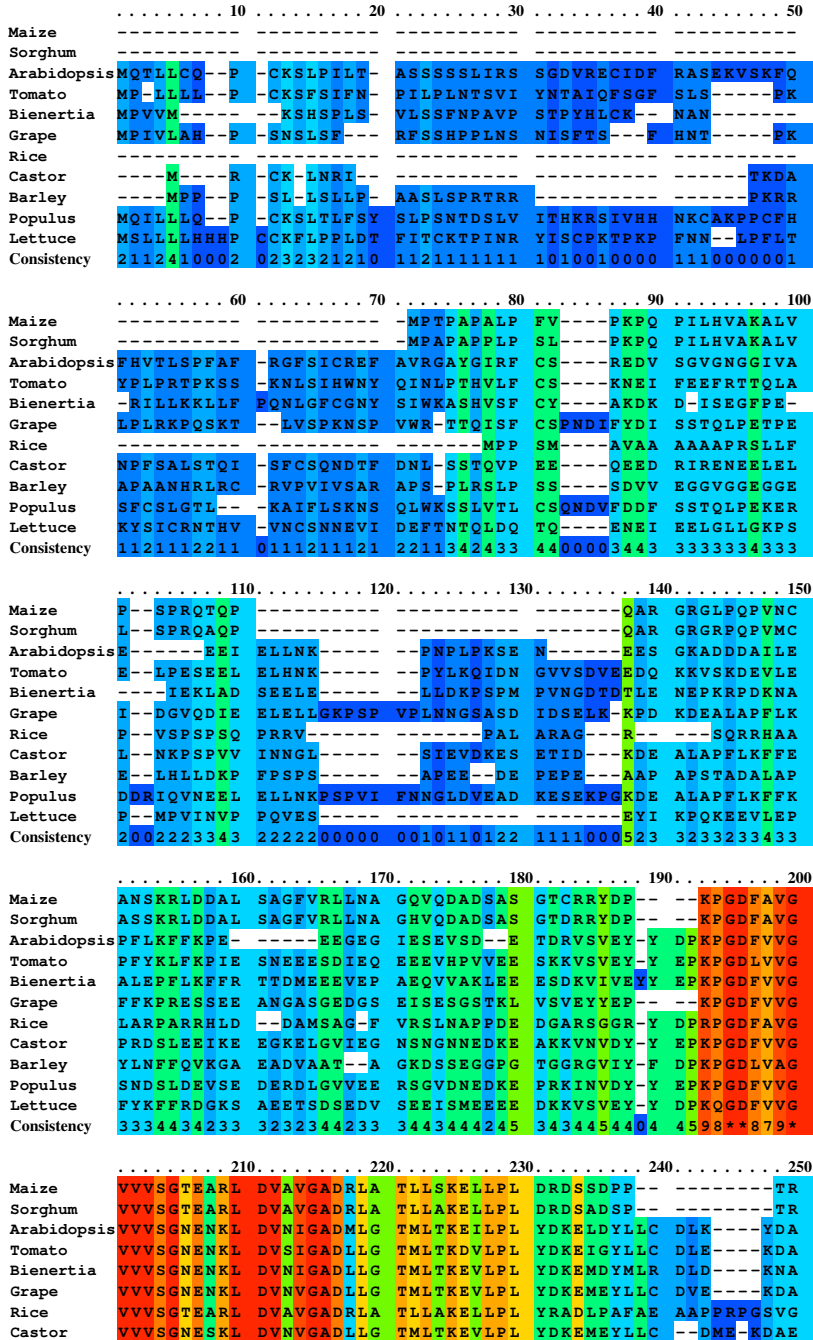
Additional File 1: Figure S1

Results colour-coded for amino acid conservation

The current colourscheme of the alignment is for amino acid conservation.

The conservation scoring is performed by PRALINE. The scoring scheme works from 0 for the least conserved alignment position, up to 10 for the most conserved alignment position. The colour assignments are:

Unconserved 0 1 2 3 4 5 6 7 8 9 10 Conserved



Results colour-coded for amino acid conservation

Barley	VVVGGDARAL	DVDVGGGEP	ALMLTKEAAP	ASPEEFAYLA	CDVAS	GGAR
Populus	VVVSGNENKL	DVNIGAD---	---	---	---	---
Lettuce	VVVSGNEYKL	DVNIGADLLG	TMLTKEVLP	YEKELDNLLC	DFE---	KNP
Consistency	**8*6847*	**59*8365	7675765776	4446443342	2120000233	

 260..... 270..... 280..... 290..... 300
Maize	QALPRLGSIG VVAGPSVD-- --DDRQKRGSR TLVAPGTVV FAEVLGRTLS
Sorghum	QALPGPGSIG VVAGLTVDDD KEARRQKRGSR TLVAPGTVV FAEVLGRTLS
Arabidopsis	EEFLVNGKMG IVKDDDEGV-- -EIAEFARQG RPVVEIGTVV FAEVLGRTLS
Tomato	EEFLVRGKMG ILSYDDAVS- ---GESTPG KPVEPGTVL FAEVLGRTLS
Bienertia	DDFIANGKMG IVRNEDA--- --LSGQPVSG RPVVDAGTVL FAEVLGRTLS
Grape	EEFMVHGKMS IVRNDDA--- --LSRVPMQG SPVETGTVL FAEVLGRTLS
Rice	AVASPAAGEG DRKPGERGG- ---G RTLVPPGTVV FAEVLGRTLS
Castor	RFMVRGKIGI IKDEAAMSG- --GP---GLG RPVETGTIL FAEVLGRTLS
Barley	EFAAEGRVGV AVGGVDLKV- --GRTGKEKC APVVGVTGVV FAEVLGRTLG
Populus	-----LLG TMLTKEVLP- ---LYDK EMEFLLCDTK KDVKEFMVKG
Lettuce	EEFLMKGKMG IVRNEEA--- --LSGGPVAG QPVVEHGTVL FAEVLGRTLS
Consistency	5343225446 6643355110 0012212225 6578438886 8888888988

 310..... 320..... 330..... 340..... 350
Maize	GRPLLSARRL FRRLAWHRAR QILQLNEPIE VKIYEWNTGG LLTRIE----
Sorghum	GRPLLSARRL FRRLAWHRAR QILQLDEPIQ VKIYEWNTGG LLTRIE----
Arabidopsis	GRPLLSRRRY FRRIAWHRVR QIKQLNEPIE VKITEWNTGG LLTRIE----
Tomato	GRPLLSRRRL FRRIAWHRVR QIKQLNEPIE VKITEWNIGG LLTRIE----
Bienertia	GRPLLSRRRY FRRIAWHRVR QMKHLGEPTE VRITWNTGG LLTRVE----
Grape	GRPLLSRRRF FRRIAWHRVR QIKQLNEPIE VRITWNTGG LLTRIE----
Rice	GRPLLSARRL FRRLAWHRAR QVMQLDEPIE VKIYEWNTGG LLTRIE----
Castor	GRPLLSRRRL FRRIAWHRVR QIKELNEPIE VRITWNTGG LLTRIE----
Barley	GRPLLSARRL FRRVAHRVR QIKQLNVPIK VKISEWNAGG LLSRIE----
Populus	KMGIVKDEVA MSPGPPGLGK PVVETGTVLF SEVLGRTLSG RPLLSRRRL
Lettuce	GRPLISRRRL FRRLAWHRVR QIKQLNEPIE VKITEWNTGG LLTRIE----
Consistency	8889896886 8886888869 8857867897 879588878* 888880000

 360..... 370..... 380..... 390..... 400
Maize	-----GLRAFLPKFE LVDRISSFTD LKNKVGCSIR VCIARLDEET
Sorghum	-----GLRAFLPKFE LVDRISSFTD LKNKVGCSIR VCIARLDEET
Arabidopsis	-----GLRAFLPKQE LVKKVNTFTE LKENVGRRL VQITRLNEDK
Tomato	-----GLRAFLPKAE LMNRVNSYTE LKENVGRRL VLI TRINEET
Bienertia	-----GLRAFLPKIE LVDRVNSFTE LKDKVGHWY VQISRINEEN
Grape	-----GLRAFLPKAE L----- -LNRVGRRL VQITRIDEAK
Rice	-----GLRAFLPKFE LMDRINTFTD LKNKVGCSIR VCIARLDEET
Castor	-----GLRAFLPKAE LMNRVKNFKE LKENVSRRL VLI TRINEDN
Barley	-----GLRAFLPKPQ MMRPRNFTD LKNVGRQMH VCI TKIDERT
Populus	RLRAWQVRVQ GLRAFLPKAE LMNRVNNFKE LKENVGRQIY VLKIRINESN
Lettuce	-----GLRAFLPKIE LVNRVNNFTE LKENVGRRIY VQITRISEDT
Consistency	0000000000 *****9**49 9647655766 8866*85573 *4*6986*56

 410..... 420..... 430..... 440..... 450
Maize	NDLIISEKKA WEMTYLKEGT LLQGTVKKIF PYGARVRIAG TNRSGLLHIS
Sorghum	NDLIISEKKA WEMTYLKEGT LLQGTVRKIF PYGAQVRIAG TNRSGLLHIS
Arabidopsis	NDLILSEKVA WEKLYLREGT LLEGTVVKIL PYGAQVKLGD SSRSGLLHIS
Tomato	NDLILSEKEA WQMLNLQEGT LVEGTVKRFL PFQAQIRLGE TNRSGLLHIS
Bienertia	NDLILSEREA WEKSYLREGI LLEGTVRKIF PYGAQVKIGQ TNRSGLLHVT
Grape	NDLILSEKDA WEKSHLQEGT LLEGTVKKIF PYGAQIMIGE SNRSGLLHIS
Rice	NDLIISEKKA WEMTYLKEGT LLQGI VHKIF PYGAQVRIAG TNRSGLLHIS
Castor	NELILSEREA WEMNLREGT LLEGNVKIF PYGAQVRIAGE TNRSGLLHIS
Barley	NELIISEKEA WAMLYLKEGA LLEGTVRKLIF PYGAQIRIGE TNRSGLLHVS
Populus	NELILSEREA WEMNLREGT LLEGTVKKLF PYGAQVRI-- ---GETNRS
Lettuce	NDLILSEKEA WNAKHLKEGT LLEGTVRKIF PYGAQIRIGE SNRSGLLHIS
Consistency	*8**8**86* *7645*7**7 *98*7*5988 *9**997964 6788*88989

 460..... 470..... 480..... 490..... 500
Maize	NISRGNVLSV SDILKIDDEV KVIVIKSNVP DKIAVSIADL ESAPGLFLSD
Sorghum	NITRGNVLSV SDILKIDDEV KVIVIKSNVP DKIALSTADL ESAPGLFLSD
Arabidopsis	NITRRRIGSV SDVLQVDES VLVVKS LFP DKISLSIADL ESEPLFLSD
Tomato	NVTQAKVTSM SNLLAVDEKV KVMVKS MFP DKISLSIANL ESEPLFLSD
Bienertia	KISRGKFDV SDLLAVGEKV KVLVRS LFP EKISLSIADL ESEPLFLSD
Grape	NITRARTSV SDLLTVDEKV KVMVKS MFP NKIALSIADL ESEPLFLSN
Rice	NISRGNVLSV SDILKIDDEV KVLVKS NVP DKIALSISDL ESTPGLFLSE
Castor	NITRSRVTV SDLLKVDV KVLVKS MFP DKISLSIADL ESEPLFVSN
Barley	KITHGQLRSV SDALRVGERV KALVIKSTTP DRIALSIRDL ESEPLFLSN
Populus	DL----- -LKVDEKV KVLVKS MFP DKISLSIADL ESEPLFVSN
Lettuce	NITRGEFASV NDVLAIDEKV KVLV----- -
Consistency	7966545377 775*59786* *98*878448 6786787678 885888885

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      . . . . . 510 . . . . . 520 . . . . . 530 . . . . . 540 . . . . . 550
Maize      REKVFSEAAE MAKR YRE QLP VTPQN P ILDD GLPGEKLPFD ---NETK---
Sorghum    REKVFSEAAE MAKR YRE --- --- QLPVM SQNP ILDDGI ---PGEMLPFD
Arabidopsis REKVFTEAAE MA ---K --- --- KYREK MPLVATSPIS ---DRPP---
Tomato     KERVSEAKQ MAKKFRQ --- --- NLPTV SATKKPEPLP ---TDRL---
Bienertia  RQRVFAEAAE MARKYRR --- --- KLPRI SANHKSLPPP ---SNLL---
Grape      KEKVFSDAAE MAKKYRQ --- --- KLP AV TATR KLEPLP ---TDAL---
Rice       KARVFSEAAE MAERYRE --- --- QLPAD SKNAKLDADL E---GGTI---
Castor     KEKVFFAEAE MAKKYRQ --- --- KLP AV LATR KSATPL ---SSTL---
Barley     KEKVFVEAED MARR YRE --- --- QMPHS PRSGEADSSP DD DDAV ---
Populus    KEKVFFAEAE MAKKYRQ --- --- KLPAS STNLKPEIPP S---KNAL---
Lettuce    ---
Consistency 6668857877 8855665000 0000046533 4332433323 0033340000

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      . . . . . 560 . . . . . 570 . . . . . 580 . . . . .
Maize      ---LYANWQ WFKFLHHS---
Sorghum    DEAKLYANWQ WFKFLHNN---
Arabidopsis ---ITSSFP QGKDEE IYAN WEFK FESQ ---
Tomato     ---PFEDEE NMYANWKWFK FDRDNVNME ---
Bienertia  ---FE DESSLYANWK WFKFLREN ---
Grape      ---PFHDEA SLYANWRWFK FERDDGPN ---
Rice       ---PFDDEA TLYANWKWFK FLEDGKLG---AVTTEHNGS
Castor     ---TFDDEA TMYANWKWFK FERD ---
Barley     ---PFEDEA GSYANWKWLK FIKSERADCN PSSTEP SGL
Populus    ---SSDTEA TLYANWKWFK FEKE ---
Lettuce    ---
Consistency 0000233434 2344443324 3222000100 000000000

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