Supplemental Figure S7. Amino acid sequence alignment of the leucine zipper region of 170 ZmbZIP proteins.

The ZmbZIP proteins are categorized into 26 sub-families (BZ1-BZ26) with similar predicted dimerization properties. The leucine zipper region is divided into heptads (*gabcdef*) from L0 to L9 to visualize the potential *g*↔ *e*' pairs. Four colors are used to differentiate between different *g*↔ *e*' pairs. Attractive basic-acidic pairs (R ↔ E and K ↔ E) are colored orange, attractive acidic-basic pairs (E ↔ R, E↔ K, D↔ R, and D↔ K) are blue, repulsive basic pairs (K↔ K, R ↔ K, R ↔ Q, Q↔ K, and K ↔ Q) are pink and repulsive acidic pairs (E ↔ E, E ↔ D, E ↔ Q, and Q↔ E) are green. If single amino acid at the positions *e* or *g* is charged, the residue is colored pink for basic amino acid and green for acidic amino acid. If the *a* or *d* position is charged, it is colored brown. Asparagines at *a* position are colored red. The prolines and glycines are bold to indicate a potential break in the α -helix. The predicted C-terminal boundary is denoted by the symbol * , other than the natural terminals which are indicated by the symbol ^.

Sub-family	ZmbZIP NO.	Leucine zipper region									
		L0	L1	L2	L3	L4	L5	L6	L7	L8	L9
		gabcdef	gabcdef	gabcdef	gabcdef	gabcdef	gabcdef	gabcdef	gabcdef	gabcdef	gabcdef
BZ1	ZmbZIP39	YTNELEN	KVSRLIE	ENKKLTT*	LKELENI	LFSEPLP	EPKYQLR	RTGSATF			
	ZmbZIP94	YTNELEN	KVARLEE	ENKRLIE*	LKVLKPL	EPLEPPP	AEQNKKQ	PPPQPK.R	KQPQPPP	PPPPPIQ	QLPPKHR
	ZmbZIP99	YTNELEN	KVFRLEE	ENKRLKK*	QQELDEI	LSSAPPP	EPKYQLR	RTGSAAF			
BZ2	ZmbZIP14	YTMELEA	EVQKLKE	QNEELQK	KQEEIME*	MQKNQVV	EVISNPY	AQKKRCL	RRTLTGP	W	
	ZmbZIP23	YTMELEA	EVQKLRE	QNQELER	KQAEIME*	MQNNEVS	EMLKDPF	GRKKRLC	LRRTLTA	PW	
	ZmbZIP46.1	YTMELEA	EVQKLKE	QNAELQK	KQVPELV*	SNPYAQK	KRCLRRT	LTGPW			
	ZmbZIP46.2	YTMELEA	EVQKLKE	QNAELQK	KQEQIME*	MQQNQVP	ELVSNPY	AQKKRCL	RRTLTGP	W	
	ZmbZIP107	YTMELEA	EVAKLKD	QNEELQK	KQVEMLK*	KQKDEVI	ERINSQH	GPKAKKL	CLRRTLT	GPW	
BZ3	ZmbZIP31	YLTELEA	KAKGLEL	RNAELIQ	RVSTLQN	ENNTLRQ	ILKNTTA*	HASKRSG	GGGGGGG	KGGDGGK	KHHLAKS
	ZmbZIP67	YLTDLEV	KVRDLEK	KNSEMIE	RLSTLQN	ENQMLRQ	ILKNTAV*	NRRGGSG	TASGEGH	GQ	
	ZmbZIP97.1	YLTELEA	RAKDLEL	RNAELIQ	RVSTLQN	ENNTLRQ	ILKNTTA*	HASKRSG	GGGKGGD	GGKKHHF	AKS
	ZmbZIP97.2	YLTELEA	RAKDLEL	RNAELIQ	RVSTLQN	ENNTLRQ	ILKNTTA*	HASKRSG	GGGKGGD	GGKKHHF	AKS
	ZmbZIP108	YLSELEV	RVKELEK	RNSELEE	KLSTLQN	ENQMLRQ	ILKNTTV*	NNRRGPG	SSSAGGD	SQ	
	ZmbZIP123.1	YLTELEA	KAKGLEL	RNAELIQ	RVSTLQN	ENNTLRQ	VIDVSGK*	EFKFTWA	SGRGELC	DIYEERQ	SGEDGNG
	ZmbZIP123.2	YLTELEA	KAKGLEL	RNAELIQ	RVSTLQN	ENNTLRQ	VIDVSGK*	EFKFTWA	SGRGELC	DIYEERQ	SGEDGNG
BZ4	ZmbZIP10.1	YIKDLET	KSKHLFA	ECRRLSY	ALQCYAA	ENMALRQ*	SLLKDRP	LGAPTAT	QESAVLT	ETLPLVS	LLWLVS1
	ZmbZIP10.2	YIKDLET	KSKHLFA	ECRRLSY	ALQCYAA	ENMALRQ*	SLLKDRP	LGAPTAT	QESAVLT	ETLPLVS	LLWLVS1
BZ5	ZmbZIP73	YVQELEK	EVRRLVN	ENLKLKR	QCKQLKL	DMAALVQ*	QSSSKSS	SHIRRTS	SSTQL		
	ZmbZIP75	YVENLEK	EVRRLVD	DNLKLKK	QCKELKR	EVAALVL*	PTKSSLR	RTSSTQF			
	ZmbZIP95	YVRELET	KVQLLQQ	ENESLRV	KYDELRE*	SVEVAVP	MVRKTLQ	RMPSAPF			
BZ6	ZmbZIP28	YVEELEG	KVKAMQA	TIADLSA	RSCVTA	ENAALKQ*	QLGGAAG	AAPPPMP	MYPTMYS	LPMPWAH	PSYPMRG
	ZmbZIP79.1	YVEELEE	KVKSMHS	VINDLSC	KISFIAA	ENATLRQ*	QLGGVGV	SGPPPGV	YPPPPPG	IHPPWVS	GYAMRPH
	ZmbZIP79.2	YVEELEE	KVKSMHS	VINDLSC	KISFIAA	ENATLRQ*	QLGGVGV	SGPPPGV	YPPPPPG	IHPPWVS	GYAMRPH
BZ7	ZmbZIP32	ETEELAT	QVESLAA	ENTSLRS	EIGRLTE	SSEKLRL	ENSALMV	KLKDTAE*	PSPSKAA	ASPSSPR	ASAENFL
	ZmbZIP43	ETEELAR	RVELLTA	ENTSLRS	EISRLTE	SSQKLRM	ENSALME	KLADGTS*	DQAQEAS	AGHQTTP	TAPSSAR
	ZmbZIP83.1	ETEELAT	QVESLAA	ENTSLRS	EIGRLTE	SSEKLRL	ENSALMV	KLKDTAE*	PSPIKAS	ASPSSPR	ASAENFL
	ZmbZIP83.2	ETEELAT	QVESLAA	ENTSLRS	EIQQLTE	SSEKLRL	ENSALMV	KLKDTAE*	PSPIKAS	ASPSSPR	ASAENFL
	ZmbZIP42	ETEELAT	QVESLAA	ENTSLRS	EIGRLTE	SSEKLRR	ENSALMA*	ISCQSAF	PLTRGAL	SLIRSQP	KSKLMHY
	ZmbZIP124	ETEELAT	QVESLAA	ENTSLRS	EIGRLTE	SSEKLRR	ENSALMA*	ISCQSAF	PLTRGAL	SLIRSQP	KSKLMHY
BZ8	ZmbZIP33	ECEELAQ	RADVLKQ	ENASLRD	EVNRIRK	EYEELLS	KNNSLKE*	KLEGKQH	KTDEAGL	NNKLQHS	GNDIQKK
	ZmbZIP58	ECEELGQ	RAEALRS	ENSSLRA	ELERIRK	EYEQLLS	QNASLKE*	KLGAASS	DSLPDMN	EQNDGDG	DGGYRKQ
	ZmbZIP63	ECEELGQ	RAETLRS	ENSSLRA	ELERIRK	EYEQLLS	QNASLKE*	KLGGSSD	PIPDMNE	QNDGNGS	DKKQSDS
	ZmbZIP120	ECEELAQ	RADVLKQ	ENASLRD	EVNRIRK	EYEELLS	RNNSLKE*	KLEGKQH	KTDEAGL	NNKLQHS	GDDSQKK
BZ9	ZmbZIP2	EWEEVAN	RADLLKQ	ENSSLKE	ELKQLQE	KCDGLTS	ENTSLHE	KLKALED*	EKSNGNW	YKD	
BZ10	ZmbZIP21.1	ECEELAR	KVADLTT	ENSALRA	ELDNLRK	ACQDMEA	ENSRLLV*	STVPSVT	TTLGMSI	EPPKAQQ	HHDDEGQ
	ZmbZIP21.2	ECEELAR	KVADLTT	ENSALRA	ELDNLRK	ACQDMEA	ENSRLLV*	STVPSVT	TTLGMSI	EPPKAQQ	HHDDEGQ
	ZmbZIP86.1	ECEELAR	KVADLTT	ENSALRA	ELDNLKK	ACQDMEA	ENSRLLG*	GVADAQV	PSVTTTL	GMSIEPP	KLQLQLQ
	ZmbZIP86.2	ECEELAR	KVADLTT	ENSALRA	ELDNLKK	ACQDMEA	ENSRLLV*	PSVTTTL	GMSIEPP	KLQLQLQ	QHHDEEG
	ZmbZIP122	ECEELAQ	KVTDLTV	VNGMLRS	ELDELKK	ACEDMEA	VTSMVIK*	TALVAMG	SGRLTQG	SS	
BZ11	ZmbZIP51	IRDELAR	KVADLSS	QNENMKK	EKDVVMQ	EYLSLKE	ANKQLKE	QVARTTA*	KKAPAGS	LAAAASP	
	ZmbZIP118	VRDELAR	KVADLSS	QNATMKK	EKDVVMK	EYLSLKE	TNEQLKA	AEQAIHH	IHHLRLSS*	LF	
BZ12	ZmbZIP11	QLSELWA	QVSHLRG	ANRRLLD	DLNRALR	SCADAER	ESARLRE	EKAELTK	KLEQLLQ*	AEKGSLS	EAAEPCK
	ZmbZIP54	QLSELWA	QVSHLRG	ANRRLLD	DLNRALR	SCADAER	ESARLRD	EKAQLAN	RLHQLLI*	IAG	
	ZmbZIP57	RLHELSL	RAAELLG	ANQRLLV	DLNRVVA	RHGAVAR	ENARLRE	EAAGLRT	RLGEVVV*	GEAAAAA	AAGGQPL
	ZmbZIP59	HLDELTA	QAAHLER	ENAHVAT	ALGLTAQ	GLLAVDA	ENAVLRT	QAAELAA	RLGLSND*	ILACMNT	TNAEAAA
	ZmbZIP64	HLDELTA	QAAHLRR	ENAHVAT	ALGLTAQ	GLLAVDA	ENAVLRT	QTAELAA	RLGLSND*	ILACMNT	NAVGAVA
	ZmbZIP66	RLYELSL	QVAELLG	TNQRLLV	ELNHVTA	KYALLAR	ENAKLRE	EAAGLQR	RLSE^		
	ZmbZIP72	QLSELWA	QVVHLRS	TNRQLLD	QLNHAIR	DCDRVLR	ENSQLRD	EQTKLQQ*	QLEMLPV	DTTESGA	MSPGS
	ZmbZIP78	QLGQLWD	QVVHLRG	DSRDLLD	RLNRAIR	DCDRVMR	DNARLRN	ERAGLQR	RLLDLIT*	DGDGDDR	PF
	ZmbZIP109	QLDELSS	RVAALRA	ANARLAV	ELSRVSA	AQARERA	ENARLRA	EAGALRE	RLAAAALA*	AAAAAGH	GQVRVVP
BZ13	ZmbZIP10	HLEELRG	RAARLRA	GNRDLAA	RLGGAQA	RAALARL	ANARLRA	EAGALAR	RLYAABR*	ALALRQV	YAASGGS
	ZmbZIP22	HHDDLTS	QVDQLKG	QNKQLNL	ALSTTSQ	NLVAVQA	QNSVLQT	QRMELAS	RLGALTE*	ILWCISS	STGTAAP
	ZmbZIP24	QLTELCA	QVVHLEG	ANRRRLD	ELNRALR	GCSDMER	ENARLQK	EKTDLST	RLGALTE*	LLERLTQ*	SSSSEPQ
	ZmbZIP84	QLDDLTA	QVAALRA	RNGAMDA	AARDAAR	RCVAVQA	ENAMLHA	RTVELSA	RLQSLVD*	LIQCMQA	GDAMYQY
	ZmbZIP87	HLDDLTS	QVNQLKD	QNKQLSM	ALSITSQ	NLVAVQA	QNSVLQT	QKMELDS	RLGALTE*	ILWYMNS	STSTSTA
	ZmbZIP98	QLTELWA	QVVHLRG	ANRRLLD	ELNRAVR	GCSDMER	EKARLQK	EKTDLGT	KLQRLTQ*	PQNAALP	SSSSEPQ
	ZmbZIP49	QLSELWA	QVVHLRG	TNRQLLD*	QLKCSTV	SSETATV	SSVKTPG				
BZ14	ZmbZIP8	HLDELVQ	EVARLQA	DNARVGA	RAADIAS	QVTRVEQ	ENTVLRA	RAAELGD	RLRSVNE	VLRVLEE*	FSGVAMD
	ZmbZIP34	HLDELAQ	EAALLQA	ENARVAA	RAADVAS	QNARVEQ	ENAVLRA	RAAELGA	RLRSVNE	VLRVLEE*	FSGVAMD
	ZmbZIP61	RLEELRA	EAARLEG	QSRELEA	RLQALAR	HGLAVRC	ENARLEA	EAAALAR	RLLAIAS*	YAQQPQH	KAGVAPA
	ZmbZIP74	RLEELVA	EVARLQA	ENAATQA	RTAALER	DLGRVDG	DNAVLRA	RHAELAG	RLQSLGG*	VLEVLQM	AGAAVDI
	ZmbZIP3	HVDDLAA	EAERLRR	ENEAMRA	GVGDAVL	RSRALEQ	ENRVLAA	HARQLCA	ALLLRNS	QLSLLGD*	VAGVPLD
	ZmbZIP115	HVDDLTA	VAERLRR	ENEAMRA	GVGGVVR	QSIELEQ	ENRVLAA	HARQLCA	TLLLRNS	QLRLLGD*	VAGLPLD
	ZmbZIP104	YTVELEA	ELNHLKE	ENERLRA	EERTLL*	SKKKMLV	EKMMEQA	RENVSAK	KVGPGLR	RWGSAMW	
BZ15	ZmbZIP12.1	QLSDLES	QVERLKG	ENATLFQ	QLSDANQ	QFSTAVT	DNRILKS	DVEALRI	KVKMAED*	MVARSAV	SCGLGDL
	ZmbZIP12.2	QLSDLES	QVERLKG	ENATLFQ	QLSDANQ	QFSTAVT	DNRILKS	DVEALRI	KVKMAED*	MVARSAV	SCGLGDL
	ZmbZIP65.1	HLADLET	QVDQLRG	ENASLFK	QLTDANQ	QFTTAVT	DNRILKS	DVEALRV	KVKLAED*	MVARGAL	SCGLGSL
	ZmbZIP65.2	HLADLET	QVDQLKG	ENASLFK	QLTDANQ	QFTTAVT	DNRILKS	DVEALRV	KVKLAED*	MVARGAL	SCGLGSL
BZ16	ZmbZIP9.1	HLTDLES	QVSRLTS	ENASLLK	RLADMTQ	KYKDASV	DNKNLTV	DVETMRR	KVRSS^		
	ZmbZIP9.2	HLTDLES	QVSRLTS	ENASLLK	RLADMTQ	KYKDASV	DNKNLTV	DVETMRR	KVNIAEE	AVRRLTG*	ITLMLPT
	ZmbZIP9.3	HLTDLES	QVSRLTS	ENASLLK	RLADMTQ	KYKDASV	DNKNLTV	DVETMRR	KVNIAEE	AVRRLTG*	ITLMLPT
	ZmbZIP9.4	HLTDLES	QVSRLTS	ENASLLK	RLADMTQ	KYKDASV	DNKNLTV	DVETMRR	KVR^		
	ZmbZIP16.1	HLNELEA	QVSQLRV	ENSSLLR	RLADVNQ	KFNEAAV	DNRVLKA	DVETLRA	KVKMAED	SVKRVTG*	MNTLFPA
	ZmbZIP16.2	HLNELEA	QVSQLRV	ENSSLLR	RLADVNQ	KFNEAAV	DNRVLKA	DVETLRA	KVKMAED	SVKRVTG*	MNTLFPA
	ZmbZIP17	HLNELEA	QVAQLRV	ENSSLLR	RLADVNQ	KFNEAAV	DNRVLKA	DVETLRA	KVKMAED	SVKRVTG*	MNTLFPA
	ZmbZIP60.1	HLNELEA	QVAQLRV	ENSSLLR	RLADVNQ	KFNEAAV	DNRVLKA	DVETLRA	KVKMAED	SVKRVTG*	MNALVPA
	ZmbZIP60.2	HLNELEA	QVAQLRV	ENSSLLR	RLADVNQ	KFNEAAV	DNRVLEA	DVETLRA	KVKMAED	SVKRVTG*	MNALVPA
	ZmbZIP85.1	HLKELED	QVAQLKA	ENSCLLR	RIAALNQ	KYNDANV	DNRVLRA	DMETLRA	KVKMGED	SLKRVIE*	MSSSVPS
	ZmbZIP85.2	HLKELED	QVAQLKA	ENSCLLR	RIAALNQ	KYNDANV	DNRVLRA	DMETLRA	KVKMGED	SLKRVIE*	MSSSVPS
	ZmbZIP85.3	HLKELED	QVAQLKA	ENSCLLR	RIAALNQ	KYNDANV	DNRVLRA	DMETLRA	KVKMGED	SLKRVIE*	MSSSVPS
BZ17	ZmbZIP62.1	HTASLEE	EVVHLRA	LNQQLVK	KLQSHAA	LEAEVAR	LRCLLVD*	IRGRIEG	EIGAFPY	QRPPPAA	KNVDLVS
	ZmbZIP62.2	HTASLEE	EVVHLRA	LNQQLVK	KLQSHAA	LEAEVAR	LRCLLVD*	IRGRIEG	EIGAFPY	QRPPPAA	KNVDLVS
	ZmbZIP76	HTASLEE	EVVHLRA	LNQQLMK	KLQSHAA	LEAEAAR	LRCLLVD*	IRGRIEG	EIGAFPY	QRPPAVK	NVDLLSS
	ZmbZIP92	HAAFLEE	EVKKLRA	ANQQLQR	RLQGHAA	LEAEVAR	LRGLLLD	IRGKIDA*	EVGGVLP	FQKPCSV	GSVACAD
	ZmbZIP101.1	RAAFLEG	EVKKLRA	ANQQLVR	RLQDHAA	LEAEVAR	LRGLLLD	VRGRIDA*	EVGVSPF	QRPCSAG	SVECGAD
	ZmbZIP101.2	RAAFLEG	EVKKLRA	ANQQLVR	RLQDHAA	LEAEVAR	LRGLLLD	VRGRIDA*	EVGVSPF	QRPCSAG	SVECGAD
BZ18	ZmbZIP30	YISELER	SVTSLQT	EVSALSP	RVAFLDH	QRSLLTV	GNSHLRQ	RIAALAQ	DKIFKDA	HQEALRK	EIERLRQ*
	ZmbZIP41	YISELER	SVTTLQN	EVSALSP	RVAFLDQ	QRTLLTV	GNSHLKQ	RIAALAQ	DKIFKDA	HQEALKK	EIERLRQ*
	ZmbZIP56	YISELER	SVTSLQM	EVSALSP	RVAFLDH	HRSLLTV	GNSHLKQ	RIAALAQ	DKIFKDA	HQEALEK	EIQRLRQ*
	ZmbZIP69	YISELER	SVTGLQM	EVSALSP	RVAFLDH	QRSLLTV	GNSHLKQ	RIAALAQ	DKIFKDA	HQEALKK	EIERLRH*
	ZmbZIP106.1	YISELER	SVTTLQN	EVSVLSP	RVAFLDQ	QRTILS^					
BZ19	ZmbZIP47	YIAELER	TVESLQN	IGADLAV	RMSSLFH	LHNALSM	ENKQLRI	HISSLQQ	AKLIKDG	QTQALKN	EAERLKQ*
	ZmbZIP70	YIAELER	TVDSLQN	IGADLAV	RVSSLFQ	LHNALSM	ENKQLRI	QISSLQR	AKLIKDG	QTQALKN	EAERLKR*
BZ20	ZmbZIP35	YIAELER	RVQSLQT	EGIEVTA	EMDFLGQ	QNIMLDL	ENKCALKQ	RLESLSQ	EHLIKRY	QQEMFER	EIGRLRT*
	ZmbZIP45	YIAELES	RVQALQS	EGVEVSA	EMEFLSQ	QNIMLDL	ENKCALKQ	RVESLAQ	EQLIKRF	QQEMFER	EIGRLRT*
BZ21	ZmbZIP1	YIGELEH	KVQILQT	EATTLSA	QLTLLQR	DSAGIAT	QNNELKF	RLQAMEQ	QAQLRDA	LNEALTA	EVQRLK V*
	ZmbZIP6	YIAELEQ	KVQILQT	EATTLSA	QLTLLQR	DSAGLAT	QNNELKF	RLQAMEQ	QAQLRDA	LNEALTG	EVQRLK L*
	ZmbZIP13	YIQELEH	KVQVLQT	EATTLSA	QLTMLQR	DSAGLAT	QNNELKI	RLQAMEQ	QAQLRDA	LNEALTA	EVQRLK L*
	ZmbZIP53	YIQELEH	KVQVLQT	EATTLSA	QLTMLQR	DSAGLAT	QNNELKI	RLQAMEQ	QAQLRDA	LNEALTG	EVQRLK L*
BZ22	ZmbZIP5	YMTDLER	KVQTLQT	EATTLSA	QLTLFQR	DTTGLST	ENAELKI	RLQAMEQ	QAQLRDA	LNDALKQ	ELERLK H*
	ZmbZIP12	YIAELER	KVQFMQR	DATALAT	QLALLQR	DTAGLTV	ENSELKI	RLQSTEQ	QIHLQDA	LNEALKS	ELQRLK V*
	ZmbZIP19.1	YIAELER	KVQTLQL	EATTLSA	QLAMLQR	DTTGMTS	ENSDLKI	RVQTMEQ	QVQLQDA	LNDRLRD	EIQQLK V*
	ZmbZIP19.2	YIAELER	KVQTLQL	EATTLSA	QLAMLQR	DTTGMTS	ENSDLKI	RVQTMEQ	QVQLQDA	LNDRLRD	EIQQLK V*
	ZmbZIP20.1	YTSELER	KVQTLQT	EATTLSA	QLTLLQR	DTSGLTT	ENRELKL	RLQAMEE	QAKLRDA	LNDALRE	EVQRLK P*
	ZmbZIP20.2	YTSELER	KVQTLQT	EATTLSA	QLTLLQR	DTSGLTT	ENRELKL	RLQAMEE	QAKLRDG	TP^	
	ZmbZIP26	YGELEL	KVQTLQT	EATTLSA	QLALLQR	DTTGLTT	ENSELKI	RLQTMEQ	QVHLQDA	LNDTLKT	EVQRLK V*
	ZmbZIP36.1	YTSELEK	KVQTLQT	EATTLSA	QLTLLQR	DTTGLTA	ENRELKL	RLQSMEE	QAKLRDG	MICSFL^	
	ZmbZIP36.2	YTSELEK	KVQTLQT	EATTLSA	QLTLLQR	DTTGLTA	ENRELKL	RLQSMEE	QAKLRDA	LNETLRE	EVQRLK P*
	ZmbZIP52	YIAELER	KVQFMQR	QALALQR	DTAGLTV	ENSDLKI	RLESTEQ	QIHLQDA	LNGALKS	EMQRLK M*	
	ZmbZIP55	YTSELER	KVQTLQT	EATTLSA	QLTLLQR	DTSGLTT	ENRELKL	RLQAMEE	QAKLRDA	LNDALRE	EVQRLK P*
	ZmbZIP90	YISELER	KVQTLQT	EATTLSA	QLTLLQR	DTTGLTT	ENSELKI	RLQTMEQ	QVHLQDA	LNDTLKA	EVQRLK V*
	ZmbZIP92	YITELER	KVQTLQT	EATTLSA	QLTLFQR	DTTGLSA	ENAELKI	RLQAMEQ	QAQLRDA	LNDALRQ	EVERLK I*
	ZmbZIP113	YITELER	KVQTLQT	EATTLSA	QLTLFQR	DTTGLSA	ENAELKI	RLHAMEQ	QAQLRDA	LNDALKQ	EIERLK L*
	ZmbZIP119.1	YTSELEK	KVQTLQT	EATTLSA	QLTLLQR	DTTGLTA	ENRELKL	RLQSMEE	QAKLRDA	LNEALRE	EVQRLK P*
	ZmbZIP119.2	YTSELEK	KVQTLQT	EATTLSA	QLTLLQR	DTTGLTA	ENRELKL	RLQSMEE	QAKLRDA	LNEALRE	EVQRLK P*
BZ23	ZmbZIP27	YMGELER	KVRVLQM	ETSTLSS	KAASSQR	ECEALRI	LNNEMKI	RLQAMEQ	QAQLKDA	LNEALTA	EVQRLK Q*
	ZmbZIP91	YMGELER	KVRVLQT	ETNTLSS	KAALSQR	ICEALRT	LNNEMKI	RLQAMEQ	QAQLKDA	LNEALTA	EVQRLK Q*
	ZmbZIP116	YIAELEQ	KVQILQT	EATAISA	HLTLLQR	DSAGIAT	QNNELQF	RLQAMAQ	QAQLRDA	LNEALTA	EVQRLK L*
BZ24	ZmbZIP81.1	YIAELES	QVMQLEE	YQAELLT	EQEDRRQ*	KRLKEVN	IVFNIIA				
	ZmbZIP81.2	YIAELES	QVMQLEE	YQAELLT	EQEDRRQ*	KRLKELV	ERVPVVI	RKKSPQD	LRRNNSM	EW	
	ZmbZIP98	YVAELES	QVMQLEE	EQTELLR	EQIDRRQ*	KRLKELT	ERAVPVI	RKKSPQD	LRRTNSM	EW	
	ZmbZIP37.1	YIAELES	LVTHLEE	ENAELLR	EQEERHQ*	KRLKELL	ERVTPVI	LRKKPSG	DLRRTNS	MQW	
	ZmbZIP37.2	YIAELES	LVTHLEE	ENAELLR	EQEERHQ*	KRLKEVT	SFG				
	ZmbZIP71	LEELYQ	FEFKLQA	EREEAAR	K^						
	ZmbZIP102	YIAELEY	MVTRLAE	EKAELLR	QQEEQFQ*	TRLEEVT	F				
BZ25	ZmbZIP7	HLDDLNS	QVNLTQS	KSQMKKT	RLVLQDM*	LKQANSD	NARCPLI	SQGPPPN	KIDSK		
	ZmbZIP15	RLEELRE	AAARLRA	EKQQLEA	RLQALAR	HDLAVRC	QNARLGA	EASALAR	RFREARR	LLALRRL*	AFAALQP
	ZmbZIP64	RAELELR	QRRALAA	RSDALSA	RALAALR	DTARLQA	EARALDR	RLGVAQR	QAVLLLA	LLALRRL*	LARARLA*
	ZmbZIP29	HTKNLER	LVETLEQ	KRKSLVA	QLQSLEK	GSAALRA	EKMEMQM	MVGELEQ	QTMFKDA	VRELLKA	EIQKLNH*
	ZmbZIP106.2	YISELER	SVTTLQV	RIHAQLL*	YIHSI						
BZ26	ZmbZIP4	YVQQLES	SKLKLAS	LEQELQK*	ARQQGIF	ISSSGDQ	THAMSGN	GAMTFDL	EYSRWQE	EENKQPN	ELRTAVN
	ZmbZIP40.1	YIQNLES	SRLKLTQ	LEQELHQ*	TRQQGIF	ISTSGDQ	PQSTSGN	GALAFDM	EYARWLE	EHNKHVN	ELRLAVN
	ZmbZIP40.2	YIQNLES	SRLKLTQ	LEQELHQ*	TRQQGIF	ISTSGDQ	PQSTSGN	GALAFDM	EYARWLE	EHNKHVN	ELRLAVN
	ZmbZIP77.1	YIVELEN	SRSKLSH	LEQELQR*	ARQQGMF	IASGRSG	DHGCSTG	GALAFDL	EYARWLD	EHQHHMN	DLRVALS
	ZmbZIP77.2	YIVELEN	SRSKLSH	LEQELQR*	ARQQGMF	IASGRSG	DHGCSTG	GALAFDL	EYARWLD	EHQHHMN	DLRVALS
	ZmbZIP77.3	YIVELEN	SRSKLSH	LEQELQR*	ARQQGMF	IASGRSG	DHGCSTG	GR			
	ZmbZIP93.1	YVQQLES	SKLKLAQ	LEQELQK*	ARQQGIF	ISSSGDQ	THAMSGN	GALTFDI	EYARWLE	DQNKQIN	ELRTAVN
	ZmbZIP93.2	YVQQLES	SKLKLAQ	LEQELQK*	ARQQGIF	ISSSGDQ	THAMSGN	GALTFDI	EYARWLE	DQNKQIN	ELRTAVN
	ZmbZIP93.3	YVQQLES	SKLKLAQ	LEQELQK*	ARQQGIF	ISSSGDQ	THAMSGN	GALTFDI	EYARWLE	DQNKQIN	ELRTAVN
	ZmbZIP93.4	YVQQLES	SKLKLAQ	LEQELQK*	ARQQGIF	ISSSGDQ	THAMSGN	GALTFDI	EYARWLE	DQNKQIN	ELRTAVN
	ZmbZIP100.1	YVEQLEN	SRLKLSQ	LEQELQR*	ARQQGIF	IPTPGDD	QQPNSTS	EKGALAF	DKDYAGW	EDEHRKQ	ISELRAA
	ZmbZIP100.2	YVEQLEN	SRLKLSQ	LEQELQR*	ARQQGIF	IPTPGDD	QQPNSTS	EKGALAF	DKDYAGW	EDEHRKQ	ISELRAA
	ZmbZIP100.3	YVEQLEN	SRLKLSQ	LEQELQR*	ARQQGIF	IPTPGDD	QQPNSTS	EKAGALA	FDKDYAG	WEDEHRK	QISELRA
	ZmbZIP105	YIQNLES	SRLKLTQ	LEQELQR*	ARQQGIF	ISTSGDQ	PQSTSGN	GALAFDM	EYARWLE	EHNKHVN	ELRAAVN
	ZmbZIP96.1	YVQQLEN	SRLKLTQ	LEQELQR*	ARQQGIF	ISSSVDQ	SHSMSGN	GALAFDM	EYARWLE	EHNRQIS	ELRAGVS
	ZmbZIP96.2	YVQQLEN	SRLKLTQ	LEQELQR*	ARQQGIF	ISSSVDQ	SHSMSGN	GALAFDM	EYARWLE	EHNRQIS	ELRAGVS
	ZmbZIP114.1	YVQQLES	SKLKLAS	LEQELQK*	ARQQGIF	ISSSGDQ	THTMSGN	GAMTFDL	EYSRWQE	EQNKQIN	ELRTAVN
	ZmbZIP114.2	YVQQLES	SKLKLAS	LEQELQK*	ARQQGIF	ISSSGDQ	THTMSGN	GAMTFDL	EYSRWQE	EQNKQIN	ELRTAVN
	ZmbZIP18.1	YIQQLET	SRMKLAQ	LELELQR*	ARQQGA	YANGSMG	DPALGYT	GSIDPGV	AAFEIEY	RHWVDEQ	KRHTAEL
	ZmbZIP18.2	YIQQLET	SRMKLAQ	LELELQR*	ARQQGA	YANGSMG	DPALGYT	GSIDPGV	AAFEIEY	RHWVDEQ	KRHTAEL
	ZmbZIP18.3	YIQQLET	SRMKLAQ	LELELQR*	ARQQGA	YANGSMG	DPALGYT	GSIDPGV	AAFEIEY	RHWVDEQ	KRHTAEL
	ZmbZIP25.1	YIQQLET	SRMKLSQ	LELELQR*	ARQQGAY	ANSGSMG	DSALGYR	CPIDPGV	SVFEIDY	SHWVDEQ	KRHTAEL
	ZmbZIP25.2	YIQQLET	SRMKLSQ	LELELQR*	ARQQGAY	ANSGSMG	DSALGYR	CPIDPGV	SVFEIDY	SHWVDEQ	KRHTAEL
	ZmbZIP25.3	YIQQLET	SRMKLSQ	LELELQR*	ARQQGAY	ANSGSMG	DSALGYR	CPIDPGV	SVFEIDY	SHWVDEQ	KRHTAEL
	ZmbZIP25	YIQQLES	SRIRLAQ	LEQELHT*	TRAHQQV	FPNGGI	LAQQSVV	GKGVPIG	GIDSLSS	EAAMFDV	EYGRWQE
	ZmbZIP89.1	YIQQLES	SRIRLAQ	LEQELHT*	ARAQGVF	FPNSGIL	ADQGVAG	KGVPIGG	IDGLSSE	AAMFDVE	YGRWQEE
	ZmbZIP89.2	YIQQLES	SRIRLAQ	LEQELHT*	ARAQGVF	FPNSGIL	ADQGVAG	KGVPIGG	IDGLSSE	AAMFDVE	YGRWQEE
	ZmbZIP89.3	YIQQLES	SRIRLAQ	LEQELHT*	ARAQGVF	FPNSGIL	ADQGVAG	KGVPIGG	IDGLSSE	AAMFDVE	YGRWQEE
	ZmbZIP38.1	YVQQLET	SRIRLQQ	VEHELQR*	ARSQGLF	VGGCSAA	GDMSSGA	AMFDMEY	ARWLDDD	TKRLAEL	RGGLQAH
	ZmbZIP38.2	YVQQLET	SRIRLQQ	VEHELQR*	ARSQGLF	VGGCSAA	GDMSSGA	AMFDMEY	ARWLDDD	TKRLAEL	RGGLQAH
	ZmbZIP80.1	YVQQLET	SRIRLQQ	IEQELHG*	ARSQGLF	PGGGGAA	GDLSSGA	VIFDMEY	ARWLEDD	TKIMTEL	QAVLQPQ
	ZmbZIP80.2	YVQQLET	SRIRLQQ	IEQELHG*	ARSQGLF	PGGGGAA	GDLSSGA	VIFDMEY	ARWLEDD	TKIMTEL	QAVLQPQ