

Table S3. The predicted interaction proteins of ZmBBXs predicted by STRING database.

Gene name	Transcript ID (B73_RefGen_v4)	Synonyms (AGP v2)	Name in String	Interaction proteins
ZmBBX1	Zm00001d029149_T001	GRMZM2G134671	100383648	
ZmBBX2	Zm00001d031662_T001	GRMZM2G159996	umc1709	ZmBBX15, ZmBBX33, ZmBBX24
ZmBBX3	Zm00001d033719_T001	GRMZM2G144346	Col2	ZmBBX22, ZmBBX28
ZmBBX4	Zm00001d002806_T001	GRMZM2G131982	103646136	ZmBBX15, ZmBBX24, bzip6; ZmBBX33, COP1, Transcription factor HY5
ZmBBX5	Zm00001d003162_T001	GRMZM2G095598	103646270	
ZmBBX6	Zm00001d003195_T001	GRMZM2G018876	AY107218	GRMZM2G039828_P01, bzip6; GRMZM2G171912_P02, 103634871; GRMZM2G425920_P01, bzip88; GRMZM2G433333_P02, 100216556; GRMZM2G464976_P02; GRMZM2G126795_P01, 100279342, E3 ubiquitin-protein ligase COP1; GRMZM2G104920_P03, Ubiquitin ligase protein COP1; GRMZM2G137046_P01, gpm254, Transcription factor HY5; GRMZM2G140355_P01, bzip80
ZmBBX7	Zm00001d006198_T001	GRMZM2G422644	umc2762	ZmBBX31, ZmBBX25, ZmBBX33, ZmBBX15, GRMZM2G126795_P01, 100279342, E3 ubiquitin-protein ligase COP1; AC233870.1_FGP003, 103630791, Protein EARLY FLOWERING 3; GRMZM2G104920_P03, Ubiquitin ligase protein COP1; GRMZM2G045275_P01, pco135758, Protein EARLY FLOWERING 3
ZmBBX8	Zm00001d039437_T001	GRMZM5G834596	dbb3	
ZmBBX9	Zm00001d049347_T001	GRMZM2G176173	100383826	
ZmBBX10	Zm00001d049464_T001	GRMZM2G081577	GRMZM2G081 577_P01	ZmBBX16, ZmBBX18, ZmBBX34, ZmBBX31
ZmBBX11	Zm00001d051018_T002	GRMZM2G019335	100273793	GRMZM2G039828_P01, bzip6; GRMZM2G433333_P02, 100216556;
ZmBBX12	Zm00001d051684_T001	GRMZM2G042198	COL14	ZmBBX32, GRMZM2G039828_P01, bzip6; GRMZM2G433333_P02, 100216556; GRMZM2G171912_P02, 103634871, bZIP transcription factor superfamily protein; GRMZM2G464976_P02; GRMZM2G140355_P01, bzip80, bZIP transcription factor superfamily protein;

				GRMZM2G126795_P01, 100279342, E3 ubiquitin-protein ligase COP1; GRMZM2G425920_P01, bzip88, Putative bZIP transcription factor superfamily protein; GRMZM2G104920_P03, Ubiquitin ligase protein COP1; GRMZM2G137046_P01, gpm254, Transcription factor HY5
ZmBBX13	Zm00001d013443_T001	GRMZM2G114137	COL8	ZmBBX22, ZmBBX28
ZmBBX14	Zm00001d014765_T001	GRMZM2G118884	dbb5	ZmBBX15, ZmBBX24, ZmBBX33, bzip6; GRMZM2G126795_P01, 100279342, E3 ubiquitin-protein ligase COP1; GRMZM2G104920_P03, Ubiquitin ligase protein COP1, Transcription factor HY5
ZmBBX15	Zm00001d015434_T001	GRMZM2G146614	100281064	GRMZM2G305096_P01; AC199571.3_FGP003, Embryonic flower 1-like protein; GRMZM2G700655_P01, 103635904, Embryonic flower 1-like protein; GRMZM2G357737_P01, 103641376, Embryonic flower 1-like protein
ZmBBX16	Zm00001d015468_T001	GRMZM2G148772	103626702	ZmBBX10
ZmBBX17	Zm00001d017147_T002	GRMZM2G095299	gpm454	GRMZM2G140355_P01, bzip80; GRMZM2G171912_P02, 103634871, Putative bZIP transcription factor superfamily protein; GRMZM2G464976_P02; GRMZM2G104920_P03, Ubiquitin ligase protein COP1; GRMZM2G433333_P02, 100216556; GRMZM2G126795_P01, 100279342, E3 ubiquitin-protein ligase COP1; GRMZM2G137046_P01, gpm254, Transcription factor HY5; GRMZM2G039828_P01, bzip6; GRMZM2G425920_P01, bzip88
ZmBBX18	Zm00001d017176_T001	GRMZM2G021777	100281289	ZmBBX10
ZmBBX19	Zm00001d017412_T001	GRMZM2G110541	Orphan134	ZmBBX15, ZmBBX24, ZmBBX33, GRMZM2G126795_P01, bzip6; 100279342, E3 ubiquitin-protein ligase COP1; GRMZM2G104920_P03, Ubiquitin ligase protein COP1, Transcription factor HY5
ZmBBX20	Zm00001d017885_T001	GRMZM2G075562	COL5	ZmBBX32
ZmBBX21	Zm00001d017939_T001	GRMZM2G041991	col12	
ZmBBX22	Zm00001d036214_T001	GRMZM2G070446	dbb8	ZmBBX3, ZmBBX13
ZmBBX23	Zm00001d036418_T001	GRMZM2G116475	dbb9	ZmBBX15, ZmBBX24, ZmBBX33, bzip6; GRMZM2G126795_P01, 100279342, E3 ubiquitin-protein ligase COP1;

				GRMZM2G104920_P03, Ubiquitin ligase protein COP1, Transcription factor HY5
ZmBBX24	Zm00001d036676_T001	GRMZM2G354319	103629679	GRMZM2G305096_P01; AC199571.3_FGP003, Embryonic flower 1-like protein; GRMZM2G700655_P01, 103635904, Embryonic flower 1-like protein; GRMZM2G357737_P01, 103641376, Embryonic flower 1-like protein
ZmBBX25	Zm00001d037327_T001	GRMZM2G012717	COL10	
ZmBBX26	Zm00001d021278_T001	GRMZM2G143718	100273363	ZmBBX15, ZmBBX24, ZmBBX33, GRMZM2G045275_P01, pco135758, Protein EARLY FLOWERING 3; GRMZM2G104920_P03, Ubiquitin ligase protein COP1; AC233870.1_FGP003, 103630791, Protein EARLY FLOWERING 3; GRMZM2G126795_P01, 100279342, E3 ubiquitin-protein ligase COP1, HY5
ZmBBX27	Zm00001d024213_T001			
ZmBBX28	Zm00001d045323_T004	GRMZM2G028594	dbb11	ZmBBX3, ZmBBX13
ZmBBX29	Zm00001d045636_T001	GRMZM2G167216	GRMZM2G167216_P01	
ZmBBX30	Zm00001d045661_T001	GRMZM2G107886	col4	
ZmBBX31	Zm00001d045735_T001	GRMZM2G405368	pco105988a	ZmBBX7
ZmBBX32	Zm00001d045804_T001	GRMZM2G013398	100282916	ZmBBX12, ZmBBX20
ZmBBX33	Zm00001d046888_T001	GRMZM2G085218	100281114	GRMZM2G305096_P01; AC199571.3_FGP003, Embryonic flower 1-like protein; GRMZM2G700655_P01, 103635904, Embryonic flower 1-like protein; GRMZM2G357737_P01, 103641376, Embryonic flower 1-like protein
ZmBBX34	Zm00001d046925_T001	GRMZM2G038783	COL13	ZmBBX10
ZmBBX35	Zm00001d024200_T001	GRMZM2G092363	100281883	
ZmBBX36	Zm00001d025957_T001	GRMZM2G098442	dbb12	ZmBBX15, ZmBBX24, ZmBBX33, bzip6; GRMZM2G126795_P01, 100279342, E3 ubiquitin-protein ligase COP1; GRMZM2G104920_P03, Ubiquitin ligase protein COP1, Transcription factor HY5