

	1	50
ACN28388 zea mays	(1)	MEGSPVARLPEANSLPDGFVPDSESSDTDAAPPSAPIVDDAIDS SPDA
XP_002468045 Sorghum bicolor	(1)	MEGSPVTRLPEANSLPDGFVPDVESSTDAAPPSAPIAADALDS IPAA
XP_002276892 Vitis vinifera	(1)	MEN TA ANQLPEVDSLDPDGFVSSAEPVAPPPTLDKES---DYK SNFS
XP_002316353 Populus trichocarpa	(1)	MENRVANQLPEVDSLDPDGFVSSMEPVAPQPTTSEQEKPVS CKEDSIGK
XP_002529722 Ricinus communis	(1)	MNV DA ANQLPEVDSLDPDGFV GS IESLAPP TPPF EQEKPLSVR NKDSISE
Consensus	(1)	MENS ANQLPEVDSLDPDGFVD S ESVAP TPPSE E DS A
	51	100
ACN28388 zea mays	(51)	TNPGGEETLS DP SLPASTAEDASSAAA EALD -----
XP_002468045 Sorghum bicolor	(51)	TNPGGEETLS DL SLPASAEDASSAAA EALG -----
XP_002276892 Vitis vinifera	(47)	TTEP SND LENESLELLD SSVDRV EKTQK R
XP_002316353 Populus trichocarpa	(51)	VDHV SEAL QELANESQTSQNGTEKPEKMRNFPVPLSDIDGCDASVHLV
XP_002529722 Ricinus communis	(51)	IVHP TGGL PEFANESQTSQSENEK VNMR -----TLFDASVL
Consensus	(51)	T SE L D SL S TS SSEK A R
	101	150
ACN28388 zea mays	(83)	-----TLC L DVVADPERALGHEGFTTAARGEGSLKEN
XP_002468045 Sorghum bicolor	(83)	-----TLS AAA AEPERALGHEGFTGAARGEEILKEN
XP_002276892 Vitis vinifera	(77)	-----TFP PL SEKDGFDSSGES PKVTNK QCSEPEGA
XP_002316353 Populus trichocarpa	(100)	VEPDQGAWQEEGTLTKPVLLD LVPE ASVGV RCSE EVIEVQ GSSQ SSDRS
XP_002529722 Ricinus communis	(89)	IVDHAHVEQVEGTATILD AN VSNTSIEV GCSE LNQVSGN CQ SSDRS
Consensus	(101)	T L A E A E P ARG S ES
	151	200
ACN28388 zea mays	(115)	R-----ASEQV GAPS DQK VV KGS---GEP KR K R VI KH SKLEK DK EL
XP_002468045 Sorghum bicolor	(115)	C-----ASEQV GAPT AQK VV KGS---GEP KR K V G R S KL ERD R EL
XP_002276892 Vitis vinifera	(109)	TEGSDAPT HL KDVSSSESIEHL KN RKLETSEV KR K S AKRT FK SEKEF
XP_002316353 Populus trichocarpa	(149)	TQGLDSQATGVKEISSSESTELQ KGR KEATE KR K N AKRT FK SEKEF
XP_002529722 Ricinus communis	(139)	VQGSSTYAT DV KEMSSSESLSQ SQ GRKLETP EAK R R N P K R S FK SEKEF
Consensus	(151)	GG TAVKEVSSSES VVKGR E E KRK AKRS FKSEKEF
	201	250
ACN28388 zea mays	(152)	FQLAQQYHKVVAERDQAI AV KDRLES L CRE FQ RQNK ML KE EC RVSTEGQ
XP_002468045 Sorghum bicolor	(152)	FELAQQYHKVVAERDAAI LV KEKLES L CRE FQ RQNK TL KE EC RVSTEGQ
XP_002276892 Vitis vinifera	(158)	LEFSLK YQ QVIAERD TAI AVRDKLES L CRE LQ RQNK ML DE EC RVSAEGQ
XP_002316353 Populus trichocarpa	(197)	LEFTLKYQ QV LTERDAAI VV RDKLES L CRE LQ RQNK ML DE EC RVSTEGQ
XP_002529722 Ricinus communis	(188)	LEFTLKYQ QV LAERDAAI AV RNKLES L CRE LQ RQNK ML ME EC RVSTEGQ
Consensus	(201)	LEFTLKYQVLAERDAAI AV RDKLES L CRE LQ RQNK ML ME EC RVSTEGQ
	251	300
ACN28388 zea mays	(202)	NMRTELSEK FD HAIKGVSAKLEE Q RVLS IQ LEEN TL RS KL KLADQ YN
XP_002468045 Sorghum bicolor	(202)	NMRALSEK FD NAIKGVSAKLEE Q RVLS IA QLEEN ML RS KL KLADQ YS
XP_002276892 Vitis vinifera	(208)	TLRLDLSTK FQ DAIKDVSSKLEE Q DE CL SQ LE NEMLR NK LKLADQ YT
XP_002316353 Populus trichocarpa	(247)	HLRLDLSTK FQ DAIKDVSNRLEE Q KEES LT Q LE NEMLR KL KEFADQ YA
XP_002529722 Ricinus communis	(238)	TLRLDLSTK FQ DAIKDVSI R LEE Q KEEC FS Q LE NEMLR T KLKLADQ YA
Consensus	(251)	LRLDLSTK FQ DAIKDVSAKLEE Q KEE ISQLKENEMLR SK LKLADQ YA
	301	350
ACN28388 zea mays	(252)	ITQ Q KYAHQLKE K MLELE LAD LRLQ Q HEKAAQ EHT Q M Q L YAEQ V SQ L MT
XP_002468045 Sorghum bicolor	(252)	ITQ Q KYAHQLKE K TLELE LAD LRLQ Q HEKAAQ EHT Q M Q L YAEQ V QL MT
XP_002276892 Vitis vinifera	(258)	ISEQ Q FAQ L K Q K T LELQ LAD LKNQ Q HEEK L IQE Q SQ M KLYAEQ V SQ L LT
XP_002316353 Populus trichocarpa	(297)	ISEQ Q NAQ L K Q K T LELQ LAD LK IQ HEEK L VQ E Q S Q M KLYAEQ V SQ L LA
XP_002529722 Ricinus communis	(288)	ISEQ Q HAQ L K Q K S LELQ LAE LK IQ HEEK L VHE Q SQ M KLYAEQ V SQ L LA
Consensus	(301)	ISEQ Q Y A Q L K Q K T LELQ LAD LKI Q QHEEK L VQ E Q S Q M KLYAEQ V SQ L LT
	351	400
ACN28388 zea mays	(302)	TEKNLRLQLASDGERFQHFDALS KS NEVFETY KQ EMER MS VI KN LKKE
XP_002468045 Sorghum bicolor	(302)	TEKNLRLQLASDGRFQHFDALS KS NEVFETY KQ EMER MS VI KN LKKE
XP_002276892 Vitis vinifera	(308)	TEKSLRLQLTADGEK FQ Q FQ EAL KS NEVFET FQ E TE MA KS IKELKKE
XP_002316353 Populus trichocarpa	(347)	TEKTLRLQLTADG K FQ Q FQ E AL KS NEVFET FQ E TD MA KS IKELKKE
XP_002529722 Ricinus communis	(338)	TEKNLR M KL TAD GEK FQ Q FQ DALL KS NEVFET FQ E TE K R TS IK KLKKE
Consensus	(351)	TEKNLRLQLTADGEK FQ Q FQ DALL KS NEVFET FQ E IE K M KS IK LKKE

Zipper1

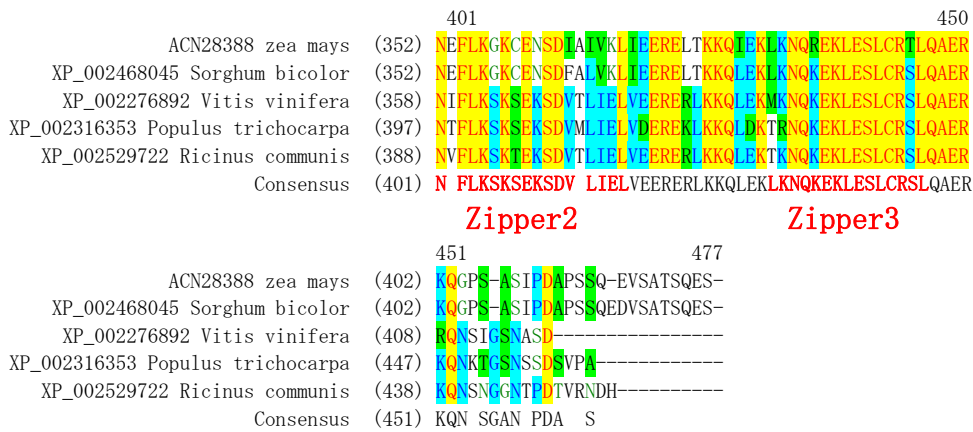


Figure S1. Alignment of ZmTaxilin protein with other Taxilin homologous proteins.

Yellow, green and blue background means the sequence was identical, weakly similar and conservative respectively. There is an obvious coiled-coil domain at 200-450aa. In the coiled-coil domain there are three conserved zipper domain which have a conserved leucine acid every seven amino acid.