



## Supplementary Materials:

**Table S1.** The Predicted Subcellular Localization of Zm-6&1-FEH2.

Program	Apoplast	ER	Golgi	CHL	MT	Other
PSORT	0.814 <sup>a</sup>	0.2	NA	NA	NA	0.178
TargetP	0.274	NA	NA	0.141	0.377	0.018
SignalP	0.923 <sup>a</sup>	NA	NA	NA	NA	NA

The three intracellular targeting prediction programs used were PSORT (<http://psort.hgc.jp/>), Target P (<http://www.cbs.dtu.dk/services/TargetP/>), and SIGNAL P (<http://www.cbs.dtu.dk/Services/SignalP/>). CHL, chloroplast; ER, endoplasmic reticulum; Golgi, Golgi body; MT, mitochondria; NA, not applicable. <sup>a</sup>The higher the value, the higher the probability of localization in the indicated subcellular compartment.

**Table S2.** Oligonucleotides used for PCR amplification and cloning. Included are primers for full length constructs (full); partial cDNAs for qPCR (qPCR); for heterologous expression of mature proteins for *P. pastoris* overexpression (pPICZ).

cDNA	Comment	Primer name	Primer sequence (5'-3')
Zm-6&1-FEH2	Full gateway +/-Stop codon	FEHGw-F	GGGGACAAGTTGTACAAAAAAAGCAGGCTCCATGCCATGGC CATGGCCCCGA
		FEHGw-R+	GGGGACCACCTTGTACAAGAAAGCTGGGTCTCATCCCTTGTAA ACCTGTGC
		FEHGw-R-	GGGGACCACTTGTACAAGAAAGCTGGGTCTCCCTTGTAAACC TGTGC
	qPCR	FEHq-F	GCATGTACCGGTTCAACAAAT
		FEHq-R	TAATTCATGTGCCCATGCTC
	pPICZαA	FEHpP-F	GACTAGTCTAGACCTCCCTGTAAACCTGTGC
		FEHpP-R	GACTAGTCTAGACCCAGTGGATCCGCACGGTCGTC
Zm-INVINH1	Full gateway -Stop codon	Inh1Gw-F	GGGGACAAGTTGTACAAAAAAAGCAGGCTCCATGAAGCTTCT GCAAGCTCTGT
		Inh1Gw-R-	GGGGACCACCTTGTACAAGAAAGCTGGGTCCAACGGCGGCGGT TACAGACAGC
Zm-ubiquitin	qPCR	UbiqPCR-F	GCTCTGACACCACATCGACAACGTGAA
		UbiqPCR-R	GCTGCTTGCCGGCGAAGATC
Zm-β-tubulin	qPCR	TubuqPCR-F	CCTATAACGCCACGCTCTGT
		TubuqPCR-R	CATTGTCCAGCACCATGCA