附表 1 分子实验所用引物

Supplementary Table 1 Primers used for molecular experiments

引物名称 Primer name	序列 Sequence
BD-StAREB1-EcoRI-R	gttatgcggccgctgcaggtcgacctaccaaggtcctgtcagtg
BD-StAREB1-1-EcoRI-F	gcatatggccatggaggccgaattcatgaatgcacctgtaggaaat
BD-StAREB1-1-EcoRI-R	gttatgcggccgctgcaggtcgacctaccaaggtcctgtcagtg
BD-StAREB1-2-EcoRI-F	gcatatggccatggaggccgaattcatgatagcatttcagcaaccaa
BD-StAREB1-2-EcoRI-R	gttatgcggccgctgcaggtcgacctaccaaggtcctgtcagtg
BD-StAREB1-3-EcoRI-F	gcatatggccatggaggccgaattcatgaaagttgtggagcgaagg
BD-StAREB1-3-EcoRI-R	gttatgcggccgctgcaggtcgacctaccaaggtcctgtcagtg
T7	taatacgactcactataggg
3'AD	agatggtgcacgatgcacag
AD-00642-EcoRI-F	catatggccatggaggccagtgaattcatgaaactagcttcactagacag
AD-00642-BamHI-R	ctgcagctcgagctcgatggatccttaagagtactgatagaacgataaac
AD-14815-EcoRI-F	catatggccatggaggccagtgaattcatgggtggtgacaagactgag
AD-14815-BamHI-R	ctgcagctcgagctcgatggatcctcacataattgagcatccagatg
AD-28586-EcoRI-F	catatggccatggaggccagtgaattcatgtcgacgtcggtagaacc
AD-28586-BamHI-R	ctgcagctcgagctcgatggatcctcattgtccatcatcatccc
AD-50159-EcoRI-F	catatggccatggaggccagtgaattcatgtcgcaagaatcactagtcc
AD-50159-BamHI-R	ctgcagctcgagctcgatggatcccctaataacgcccaattcccc
AD-50354-EcoRI-F	catatggccatggaggccagtgaattcatggcatacgatttgaggaacag
AD-50354-BamHI-R	ctgcagctcgagctcgatggatccttagtaagatggattgtttagc
AD-41835-EcoRI-F	catatggccatggaggccagtgaattcatgaagatttttgtgaagactttg
AD-41835-BamHI-R	ctgcagctcgagctcgatggatcctcattcatcaaactcatgcatg
AD-16301-EcoRI-F	catatggccatggaggccagtgaattcatggacgctctgaattcttatgc
AD-16301-BamHI-R	ctgcagctcgagctcgatggatcctcaggtttcgatcatgggctc
AD-StSnRK2.1-XmaI-F	catggaggccagtgaattccacatggagcgttatgagatagtgaag
AD-StSnRK2.1-BamHI-R	ctgcagctcgagctcgatggatctcacagtaaaccagcaaaatcag
AD-StSnRK2.2-XmaI-F	catggaggccagtgaattccacatggaggaaaagtatgagcttttgaag
AD-StSnRK2.2-BamHI-R	ctgcagctcgagctcgatggatctcagacataaacagcaaagtc
AD-StSnRK2.3-XmaI-F	catggaggccagtgaattccacatggatcggacggcagtg
AD-StSnRK2.3-BamHI-R	ctgcagctcgagctcgatggatcttacattgcatagacaatctctcc
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AD-StSnRK2.4-BamHI-R	ctgcagctcgagctcgatggatcttaggtgagacgaacttc
AD-StSnRK2.5-XmaI-F	catggaggccagtgaattccacatggaaagatatgaaattcagaaag
AD-StSnRK2.5-BamHI-R	ctgcagctcgagctcgatggatctcataatgcacatacaaaatcacc
AD-StSnRK2.6-XmaI-F	catggaggccagtgaattccacatgcagaattacgaagttgtgaagg
AD-StSnRK2.6-BamHI-R	ctgcagctcgagctcgatggatcttaagcatcatcatgtgtgatatg
cLUC-StAREB1-BamHI-F	gtacgcgtcccggggcggtacccggatgggatcttacatgaatttc
cLUC-StAREB1-SalI-R	cgaacgaaagctctgcaggtcgacctaccaaggtcctgtcagtgtc
nLUC-00642-BamHI-F	ggacgagctcggtacccgggatccatgaaactagcttcactagac
nLUC-00642-SalI-R	ggacgcgtacgagatctggtcgacagagtactgatagaacgataaac
nLUC-14815-BamHI-F	ggacgagctcggtacccgggatccatgggtggtgacaagactg
nLUC-14815-SalI-R	ggacgcgtacgagatctggtcgaccataattgagcatccagatgcattc
nLUC-16301-BamHI-F	ggacgagctcggtacccgggatccatggacgctctgaattcttatg
nLUC-16301-SalI-R	ggacgcgtacgagatctggtcgacggtttcgatcatgggctctg
nLUC-28586-BamHI-F	ggacgagctcggtacccgggatccatgtcgacgtcggtagaacc

nLUC-28586-SalI-R	ggacgcgtacgagatctggtcgacttgtccatcatcatcccttc
nLUC-41835-BamHI-F	ggacgagctcggtacccgggatccatgaagatttttgtgaagactttg
nLUC-41835-SalI-R	ggacgcgtacgagatctggtcgacttcatcaaactcatgcatgtgatc
nLUC-50159-BamHI-F	ggacgagctcggtacccgggatccatgtcgcaagaatcactagtc
nLUC-50159-SalI-R	ggacgcgtacgagatctggtcgacataacgcccaattccccaaac
nLUC-50354-BamHI-F	ggacgagctcggtacccgggatccatggcatacgatttgaggaac
nLUC-50354-SalI-R	ggacgcgtacgagatctggtcgacgtaagatggattgtttagcaaatg
nLUC-StSnRK2.1-BamHI-F	ggacgagctcggtacccgggatccatggagcgttatgagatagtg
nLUC-StSnRK2.1-SalI-R	gacgcgtacgagatctggtcgaccagtaaaccagcaaaatcag
nLUC-StSnRK2.3-BamHI-F	ggacgagctcggtacccgggatccatggatcggacggcagtgac
nLUC-StSnRK2.3-SalI-R	ggacgcgtacgagatctggtcgaccattgcatagacaatctctccac
nLUC-StSnRK2.4-BamHI-F	ggacgagctcggtacccgggatccatggagaaatacgagcttgtg
nLUC-StSnRK2.4-SalI-R	gggacgcgtacgagatctggtcgacggtgagacgaacttcccta
Actin-F	gggatggagaagtttggtggtgg
Actin-R	cttcgaccaagggatggtgtagc
qP-StAREB1-F	gatcccctggaaacgattttg
qP-StAREB1-R	gccacttcagcttccaactc
qP-StSnRK2.1-F	tgcgaggatctgtaatgctg
qP-StSnRK2.1-R	ataagcaggtgtccccacag
qP-50354-F	gcttcaaaggcatcctctgga
qP-50354-R	accgtcagcaaattccgtga

附表 2 候选蛋白信息

Supplementary Table 2 Information of candidate proteins

序号 Number	CDS 序列号 CDS ID	功能注释 Functional annotation	亚细胞定位 Subcellular localization
1	PGSC0003DMC400026764	CONSTANS interacting protein 2a	细胞质、细胞核 Cytoplasm、Nucleus
2	PGSC0003DMC400039690	Oligouridylate binding protein	叶绿体、细胞核 Chloroplast、Nucleus
3	PGSC0003DMC400055882	Conserved gene of unknown function	胞外 Extracell
4	PGSC0003DMC400002846	Plant ubiquilin	细胞核 Nucleus
5	PGSC0003DMC400031888	S-adenosylmethionine synthase 1	细胞质 Cytoplasm
6	PGSC0003DMC400050159	LeArcA1 protein,WD40 repeat	细胞质 Cytoplasm
7	PGSC0003DMC400025336	Constitutive plastid-lipid associated protein	细胞质 Cytoplasm
8	PGSC0003DMC400028586	Transcription factor TCP7	胞外、细胞核 Extracell、Nucleus
9	PGSC0003DMC400002800	Beta-amylase	细胞质、胞外 Cytoplasm、Extracell
10	PGSC0003DMC400016301	CSN5 protein	细胞质、细胞核

			Cytoplasm、Nucleus
11	PGSC0003DMC400014815	Proline-rich protein,Heavy metal-associated domain superfamily	细胞核 Nucleus
12	PGSC0003DMC400020148	UDP-glucuronate decarboxylase 3	内质网 Endoplasmic reticulum
13	PGSC0003DMC400000642	VERNALIZATION INDEPENDENCE 3,WD40 repeat	细胞质 Cytoplasm
14	PGSC0003DMC400050354	Proline-rich cell wall protein,Ubiquitin-associated domain	胞外、细胞核 Extracell、Nucleus
15	PGSC0003DMC400040933	EMB2755	细胞质 Cytoplasm
16	PGSC0003DMC400000789	Osmotin	胞外 Extracell
17	PGSC0003DMC400003565	DnaJ	细胞质、线粒体 Cytoplasm、Mitochondrion
18	PGSC0003DMC400041835	RAD23,XPC-binding domain superfamily, Heat shock chaperonin-binding	细胞核 Nucleus
19	PGSC0003DMC400010984	Proteasome subunit alpha type	细胞质、细胞核 Cytoplasm、Nucleus
20	PGSC0003DMC400002882	Glycine-rich protein	细胞质、细胞核 Cytoplasm、Nucleus
21	PGSC0003DMC400033768	Wound-induced protein WIN1	胞外 Extracell

附表 3 StSnRK2 基因家族信息

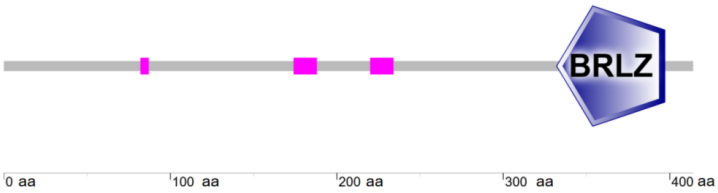
Supplementary Table 3 StSnRK2 gene family information

CDS 序列号 CDS ID	名称 Name
PGSC0003DMC400053705	StSnRK2.1
PGSC0003DMC400045485	StSnRK2.2
PGSC0003DMC400044922	StSnRK2.3
PGSC0003DMC400041188	StSnRK2.4
PGSC0003DMC400040892	StSnRK2.5
PGSC0003DMC400040555	StSnRK2.6
PGSC0003DMC400031047	StSnRK2.7
PGSC0003DMC400028222	StSnRK2.8



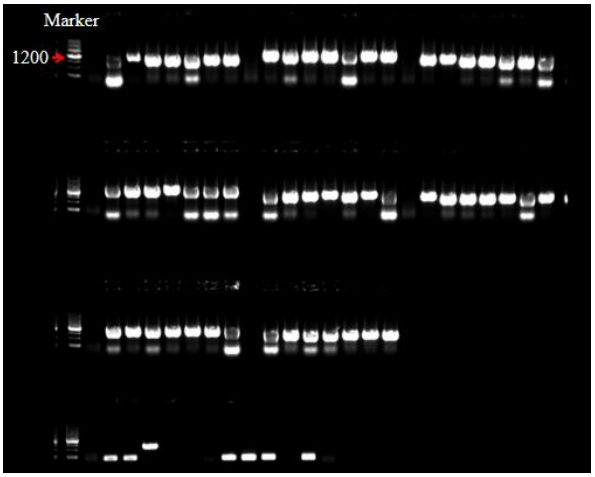
附图 1 *StAREB1* CDS 序列扩增

Supplementary Fig.1 Amplification of *StAREB1* CDS



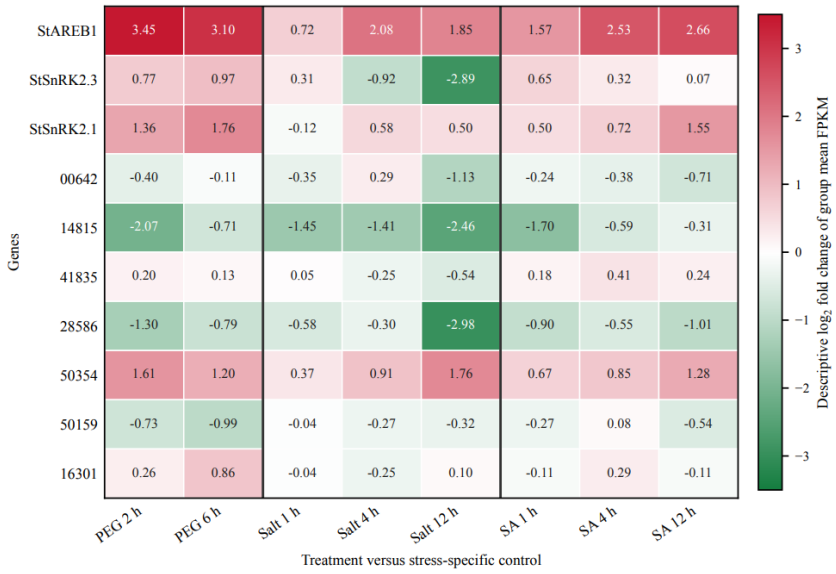
附图 2 StAREB1 蛋白结构域分析

Supplementary Fig.2 Domain analysis of StAREB1 protein



附图 3 互作蛋白的序列扩增

Supplementary Fig.3 Sequence amplification of interacting proteins



每个处理的两个平行先计算平均 FPKM，再按 log2[(mean treatment FPKM+1)/(mean stress-specific control FPKM+1)]计算描述性 log2 倍数变化。每个单元格标注相应的 log2FC 数值并保留两位小数；红色和绿色分别表示相对于相应胁迫实验对照的升高和降低

The mean FPKM value of the two biological replicates was first calculated for each condition. Descriptive log_2 fold changes were then calculated as log_2[(mean treatment FPKM + 1)/(mean stress-specific control FPKM + 1)]. The corresponding log_2FC value is displayed in each cell and rounded to two decimal places. Red and green indicate increased and decreased expression relative to the corresponding stress-specific control, respectively. These log_2FC values are descriptive and do not indicate statistical significance.

附图 4 不同胁迫处理相对于各自对照的描述性表达倍数变化

SFig.4 Descriptive expression fold changes under different stress treatments relative to their respective controls