

Supplementary Figure 1.

(a) Sequence alignment of BZR1 family of transcription factors in *Arabidopsis* (AtBZR1 and AtBES1), rice (OsBZR1), *Selaginella* (SmBZR1), and *Physcomitrella* (PpBZR1).
(b) Sequence alignment of BZR1 and its homologous proteins in *Arabidopsis*.



Supplementary Figure 2.

(a) BZR1 Δ EAR is partially dephosphorylated in the absence of BR signal. Seedlings were grown on the 2 μ M PPZ medium for 5 days and then treated with mock or 100 nM BL for 1 hour. BZR1-YFP was detected by immunoblot using anti-GFP antibody and endogenous BZR1 was detected by immunoblot using anti-BZR1 antibody. Ponceau S staining is shown for loading control.

(b) Both BZR1 and BZR1 Δ EAR interact with BIN2. Yeast clones were grown on the synthetic dropout (+HIS) or synthetic dropout without histidine (-HIS) plus 1mM 3AT medium. AD : activation domain fusion vector, BD : DNA binding domain fusion vector, x : empty vector.

(c) Expression levels of *BIN2* in the wild type and *bzr1-1D* Δ *EAR-OX*. Seedlings were grown on the 2 μ M PPZ medium for 5 days before harvesting for RNA extraction. Gene expression levels were normalized to that of *PP2A* and are shown relative to the expression levels in wild type. Error bars indicate the s.d. (*n*=3). ** : *P*<0.01 by Student's *t*-test.



Supplementary Figure 3.

qRT-PCR analyses of BR-activated genes in the *tpl;tpr1;tpr4* triple mutant. Total RNA were extracted from etiolated seedlings grown on the medium containing 2 μ M PPZ. The relative gene expression levels were determined by qRT-PCR. Numbers indicate the ratios of expression levels (*bzr1-1D* / Col-0 or *bzr1-1D;tpl;tpr1;tpr4* / *tpl;tpr1;tpr4*). The error bars indicate the s.d. (*n*=3).



Supplementary Figure 4. Full scan of western blot images in Figures.

Supplementary Table 1. Primer list

| qRT-PCR | | | |
|---------|---------------------------|---------------------------|--|
| Gene | Forward | Reverse | |
| PP2A | TATCGGATGACGATTCTTCGTGCAG | GCTTGGTCGACTATCGGAATGAGAG | |
| SAUR15 | AAGAGGATTCATGGCGGTCTATG | GTATTGTTAAGCCGCCCATTGG | |
| IAA19 | GGTGACAACTGCGAATACGTTACCA | CCCGGTAGCATCCGATCTTTTCA | |
| PRE1 | GTTCTGATAAGGCATCAGCCTCG | CATGAGTAGGCTTCTAATAACGG | |
| PRE5 | AACGGCGTCGTTCTGATAAG | CATGAGTAAGCTTCTAATCACGG | |
| PRE6 | TCCAACACCTCATCCCTGAACTTCG | CGGTCACTGAGGTCATCAACCTCTC | |
| CPD | TTGCTCAACTCAAGGAAGAG | TGATGTTAGCCACTCGTAGC | |
| DWF4 | GGTGATCTCAGCCGTACATTTGGA | CCCCACGTCGAAAAACTACCACTTC | |
| TPL | CCATCTCCTGTGAACAATCCACTGC | CAAGAGGTGTTGGAACAGGTGACG | |
| TPR1 | GGACGGTTCCCTATTCGGAGTTG | :TTGCTTGTTCGGAGTGGAAAATGC | |
| TPR2 | GGCACGAGGCACCAGTTTATTCC | GTCCCGGTGCGTCATAATCAACC | |
| TPR3 | TGCTGGAGGAAAAGTCTCGTTGTTC | AATGGCGATGACGTTATTGTCCTGA | |

| ChIP-PCR | | | |
|----------|----------------------------|---------------------------|--|
| Gene | Forward | Reverse | |
| PP2A | CGGCTTTCATGATTCCCTCT | GCCTTAAGCTCCGTTTCCTACTT | |
| UBC30 | CAAATCCAAAACCCTAGAAACCGAA | AACGACGAAGATCAAGAACTGGGAA | |
| TPL | AGTCATTGCCCTCAAGTTTGAC | CGAGTTGAACATTTCTCCATCAC | |
| TPR1 | CCAAGTAGACATGATCCTCTGTGT | TGTCGTGTTATGAGGGAAATGTG | |
| TPR2 | AAGTATCTCGTATTTCTCACGCTCTG | GATTCGAAAAATGGAATTGAAGTG | |
| TPR3 | AAGTTGATTTGGAGATAGAGTGGC | AAACGAAGAGTGCATCGAAAGC | |

| DNA pull-down | | | |
|---------------|--------------------------------|----------------------------------|--|
| Gene | Forward | Reverse | |
| DWF4 | TCTTTGACCGCACGCTCGTGTAGGGGTCCT | biotin- TAAACCTAACCAATGAGCTTCATG | |