



Figure S2

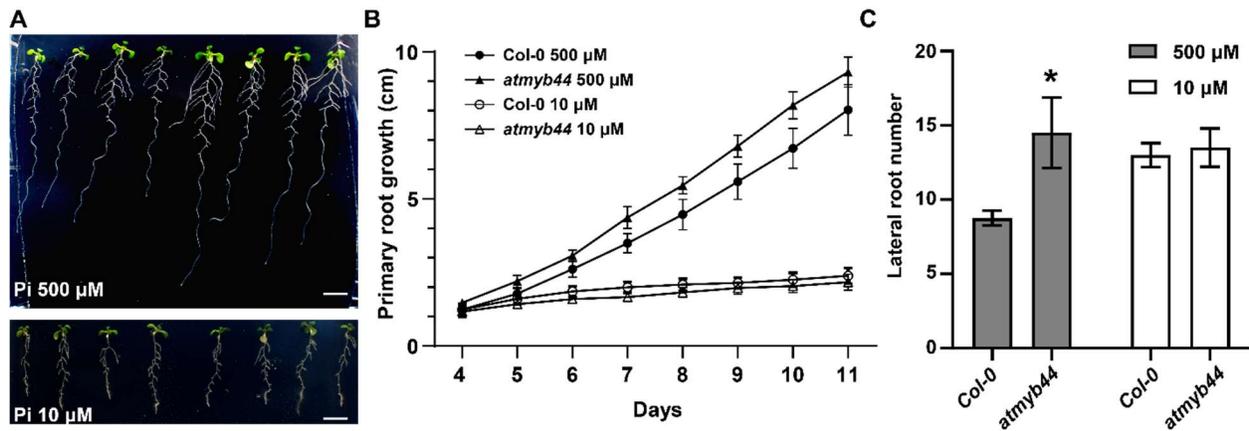


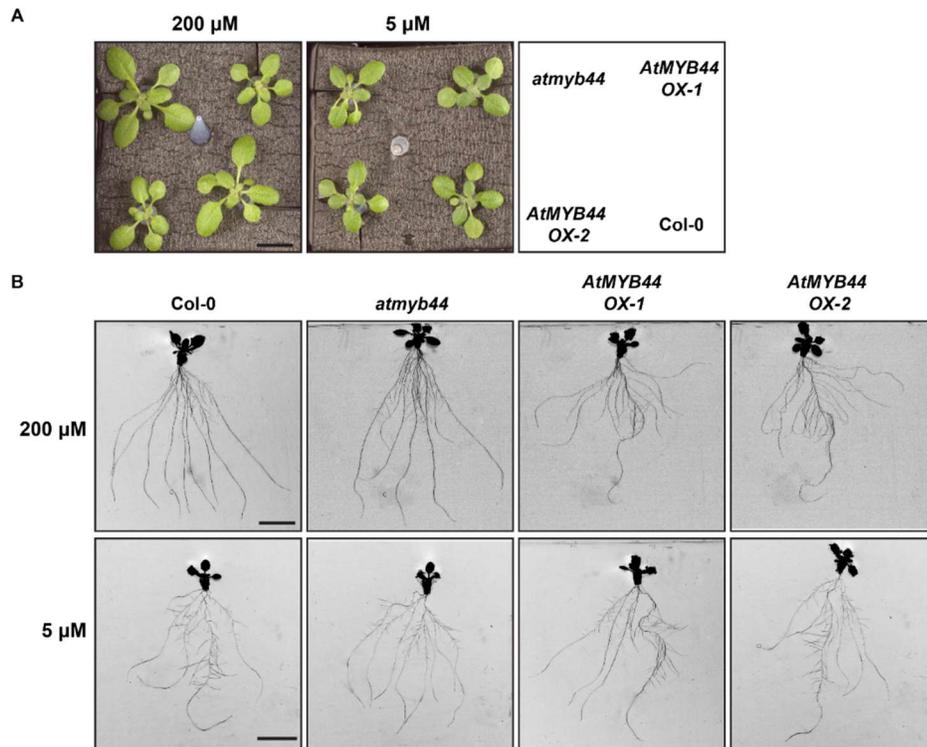
Figure S2. AtMYB44 is involved in primary and lateral root development.

(A) *atmyb44* displays enhanced primary root growth under Pi-sufficient (200  $\mu\text{M}$ ) conditions. WT and *atmyb44* were grown on Pi-sufficient (200  $\mu\text{M}$ ) and -starvation (10  $\mu\text{M}$ ) media for 11 days after germination.

(B) Time course measurement of primary root growth in WT and *atmyb44* seedlings.

(C) *atmyb44* shows enhanced lateral root formation under Pi-sufficient (200  $\mu\text{M}$ ) conditions.

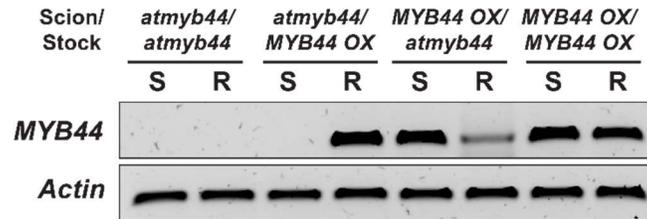
Figure S3



**Figure S3. AtMYB44 serves as a potential negative regulator in shoot and root development.**

Representative shoot (A) and root (B) images of WT, *atmyb44*, *AtMYB44 OX-1* and *AtMYB44 OX-2* plants grown in a hydroponic culture system with Pi-sufficient (200  $\mu$ M, left panel in Figure S3A, upper panel in Figure S3B) and -starvation (5  $\mu$ M, middle panel in Figure S3A, lower panel in Figure S3B) treatment. The right panel of Figure S3A indicates the position of WT, *atmyb44*, *AtMYB44 OX-1* and *AtMYB44 OX-2* plants in the hydroponic culture system. Bar = 1 cm.

**Figure S4**



**Figure S4. Mobility of *AtMYB44* mRNA.**

*AtMYB44* is graft-transmissible from the *AtMYB44* OX-1 scion into the *atmyb44* rootstock.

Table S1. List of PCR primers used in this study

Primer Name	Oligonucleotide Sequence 5-3'	Target Gene Name
055F_AtACT2	GAAATCACAGCACTTGCAC	AtActin2
055R_AtACT2	AGCCTTTGATCTTGAGAG	AtActin2
F_AtMYB44	TCTCCACCTGTTGTTACTGGGCTT	AtMYB44
R_AtMYB44	TTGACTCGTGGCTACGGTTTGACT	AtMYB44
060F_AtMYB70	GGCGACGATTGCACGGCTTC	AtMYB70
060R_AtMYB70	CCATCATACCCTCCATTACCACCG	AtMYB70
061F_AtMYB73	GCAGCGTCGAAGGGCAAAGT	AtMYB73
061R_AtMYB73	CCGATGGACTTCCGGGACTCA	AtMYB73
048F_AtMYB77	TGTCTTCGTCTTCGGAGGAT	AtMYB77
048R_AtMYB77	CCGCCATGTAACCTCCTCACT	AtMYB77
086F_AtPHT1;4	TGACGTGGCCAAGACGCAAT	AtPHT1;4
086R_AtPHT1;4	GGCTTTTGTGCGCCTTCCAC	AtPHT1;4
088F_proAtMYB44	CACCAAGATGAAATAGTACTTG	AtMYB44 promoter
088R_proAtMYB44	TGATTTTGGAAATGTTTATCAAA	AtMYB44 promoter
Pht1-2-F	GCAACGAAGCCAAGGGTGTC	AtPHT1;2
Pht1-2-R	GAAAGCCCCACGGGTCTTCT	AtPHT1;2