

BRS1 Function in Facilitating Lateral Root Emergence in *Arabidopsis*

Supplementary 1: Video. BRS1 accumulate at the dome of LPR. 48 continuously images were collected with microscopy (Olympus IX83) observation, and stacked using software ImageJ 1.48V.

Supplementary 2:

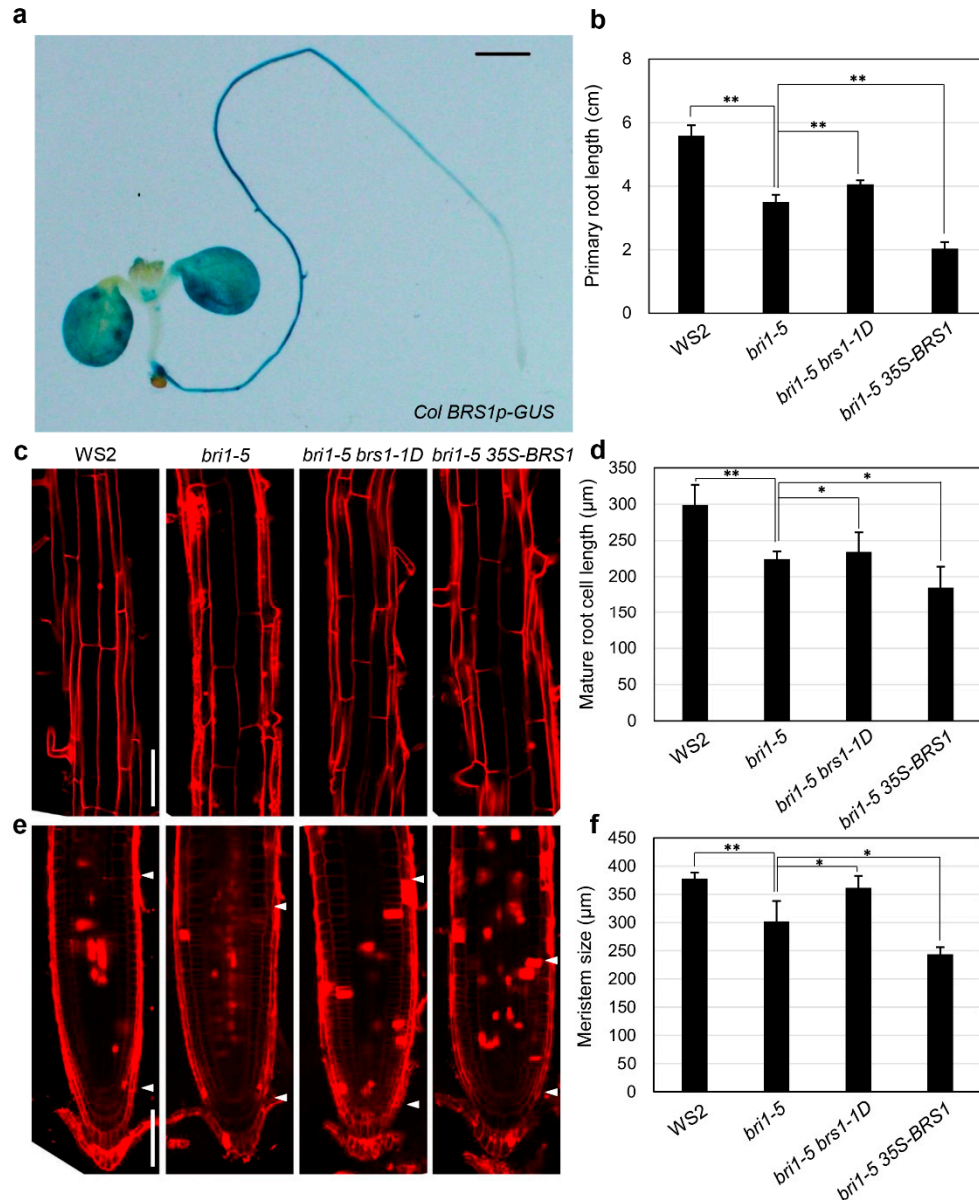


Figure S1. The variation of primary root length and primary root tip in different mutants and its WT (WS2). (a) GUS-staining assay of 9-day-old *BRS1p-GUS* transgenic line (Col background). Bar=1 mm. (b,d,f) The primary root length, mature root cell length and meristem size were quantified of WT (WS2), *bri1-5*, *bri1-5 bri1-1D* and *bri1-5 35S-BRS1* at 8 DAG. Mature root cell length were measured by root epidermis cell length in (c), and root meristem size were measured by distance between the elongation zone and the quiescent center, as marked by white triangles in (e). Data are presented as means \pm SE ($n > 15$) from the independent experiments. The asterisks indicate a significant difference between compared lines with Student's t-test (* $p < 0.05$, ** $p < 0.01$). (c,e) Confocal fluorescence images of elongation zone cells and root tips in PI-stained primary root at 8 DAG. Bar = 100 μm .