Supplemental Materials and Methods

Expression of $(His)_6$-tagged proteins in E. coli and EMSA. $(His)_6$-tagged AtbZIP10, AtbZIP63 and LSD1 proteins were purified on Ni-NTA agarose as described (Wellmer et al., 2001). Purified denatured proteins were refolded by overnight dialysis in Slide-A-Lyzer cassettes (Pierce) at 4°C against dialysis buffer (50 mM Tris/HCl pH 8.0, 150 mM NaCl). After centrifugation (1 h at 100.000xg and 4°C) the protein content of the solution was determined using Amido Black (Harter et al., 1994).

Sequences of the G-box and C-box probes, radioactive labelling and the experimental conditions for EMSA were performed as described (Harter et al., 1994). Competition assays were carried out by addition of an 10x, 100x or 1000x excess of non-labelled G-box, C-box, mutated Gm-box or mutated Cm-box probes (sequences upon request) to the reaction mix (total volume: 10 µl) containing 0.3 µg AtbZIP10, 0.5 ng of radioactively labelled C-box probe and 10 ng poly-dIdC in binding buffer (Harter et al., 1994). LSD1 effects on AtbZIP10 DNA-binding capacity were tested as follows: To 0.3 µg AtbZIP10 of reaction mix 0.15 µg, 0.3 µg and 0.6 µg LSD1 were added, and the mixture was incubated for 10 min on ice. Then, C-box DNA was added. Alternatively, addition of C-box DNA to AtbZIP10 was done before addition of LSD1. After further incubation for 10 min on ice, the DNA binding activity of AtbZIP10 in the presence of LSD1 was assayed by EMSA.

Complementation assays. Four week old *lsd1* mutant plants homozygous for a native promoter-*LSD1-myc* epitope tagged construct were sprayed with 150 µM BTH. Development of *lsd1* rcd was observed macroscopically and by Trypan Blue staining. *lsd1-2 atbzip10* double mutant plants were transformed with an HA-epitope tagged *AtbZIP10* construct driven by the 35S CaMV promoter. Four week old T1 plants were sprayed with 150 µM BTH. Complementation was determined using a conductivity assay (described in Materials and methods).