

Supplemental Material: 5 files, uploaded together with this manuscript

- **Supplemental Figure 1:** Sequence alignment of the members of both monophyletic lineages within the AtMIKC* subgroup.
- **Supplemental Figure 2:** Overview of all sequences enriched by two of the AtMIKC* complexes in RBSS, subdivided into relevant categories.
- **Supplemental Table I:** List of the AtMIKC* genes, and of all BCP-specific and TCP/MPG-specific genes represented on the ATH1 microarray chip, with their expression levels in all stages of pollen development and in other plant tissues.
- **Supplemental Table II:** Additional information and original data concerning the occurrence and distribution of CArG-boxes in Arabidopsis promoters.
- **Supplemental Data:** Selection of *in silico* predicted direct target genes of the AtMIKC* complexes in pollen. The complete list is presented in Supplemental data 4.