

Description of Additional Supplementary Files:

Supplementary Data 1a: BLASTp-based comparison of genes with known function in cellular morphogenesis between septal porebearing and -lacking ascomycete species

Supplementary Data 1b: BLASTp-based comparison genes involved in septal pore regulation between septal pore-bearing and - lacking ascomycete species

Supplementary Data 2: 776 candidate septal pore proteins

Supplementary Data 3: Strains used for the current study

Supplementary Data 4: List of genes not producing apparent EGFP signal

Supplementary Data 5a: Substitution rates of SPP orthologous group proteins in fungi

Supplementary Data 5b: SPP orthologous group proteins used in substitution rate analysis

Supplementary Data 5c: Fungal proteins in the orthologous group containing each SPP protein

Supplementary Data 5d: List of 81 fungal proteomes used in orthologous group analysis

Supplementary Data 6: Primers used for the current study