

**Fig. S6.** Confocal laser scanning microscopy showing the immunofluorescence (Cy3, red) of four allergens on pollen grains of *Artemisia annua* by labeling with the specific antibodies.

**a** defensin like protein Art an 1 by mAb A7-G4-E6. **b** pathogenesis related protein Art an 2 by mAb C9-C1. **c** non-specific lipid transfer protein Art an 3 by mAb A9-G10. **d** putative galactose oxidase allergens Art an 7 by specific pAb (T1).

Blue signal is nuclei, bar is 20μm or 50μm. 400x magnification, excitation (543nm) and emission (590nm) laser for Cy3 and laser excitation 405nm, emission (420nm) for DAPI. W-pollen wall, N-pollen nuclei.