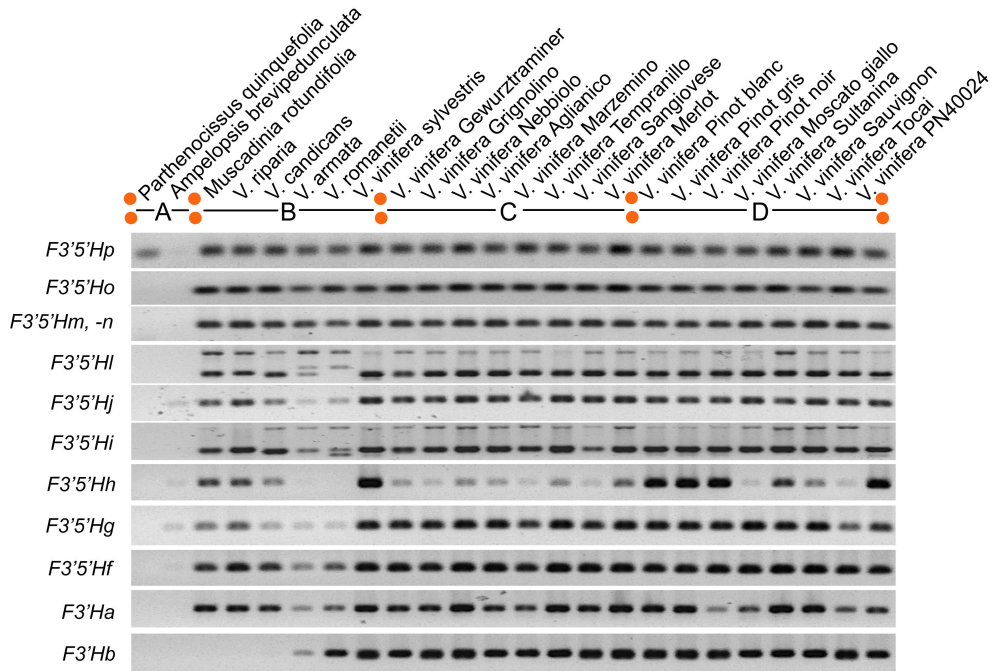


Additional file 8 – Conservation and SSCP polymorphisms of duplicate *F3'5'Hs* in the family Vitaceae

PCR amplicons were obtained from genomic DNA using copy-specific primers. DNA samples included the ornamental grapevines Virginia creeper *Parthenocissus quinquefolia*, native to Northeastern-America, and the porcelain berry *Ampelopsis brevipedunculata*, native to temperate areas of Asia (segment A), wild grapevines (segment B) including the $2n = 40$ *Muscadinia rotundifolia*, two North American species *V. riparia* and *V. candicans*, two Asian species *V. armata* and *V. romanetii*, and a spontaneous ecotype of *V. vinifera* ssp *sylvestris* collected in woods of Northeastern Italy; red-skinned cultivars of the domesticated *V. vinifera* ssp *sativa* (segment C); white-skinned cultivars (Pinot bud sports with mutations for skin colour are shown beside Pinot blanc) and the nearly-homozygous line PN40024 (segment D). PCR amplicons were run in agarose gel (**section a**) and in denaturing gel for detecting single-strand conformational polymorphisms (**section b**). Among *F3'5'Hs*, the isolated gene copies *F3'5'Hp*, -*o*, -*m*, -*n* showed the lowest levels of conformational polymorphisms; while segmentally duplicated *F3'5'Hs* were more variable across taxa.

a



b

