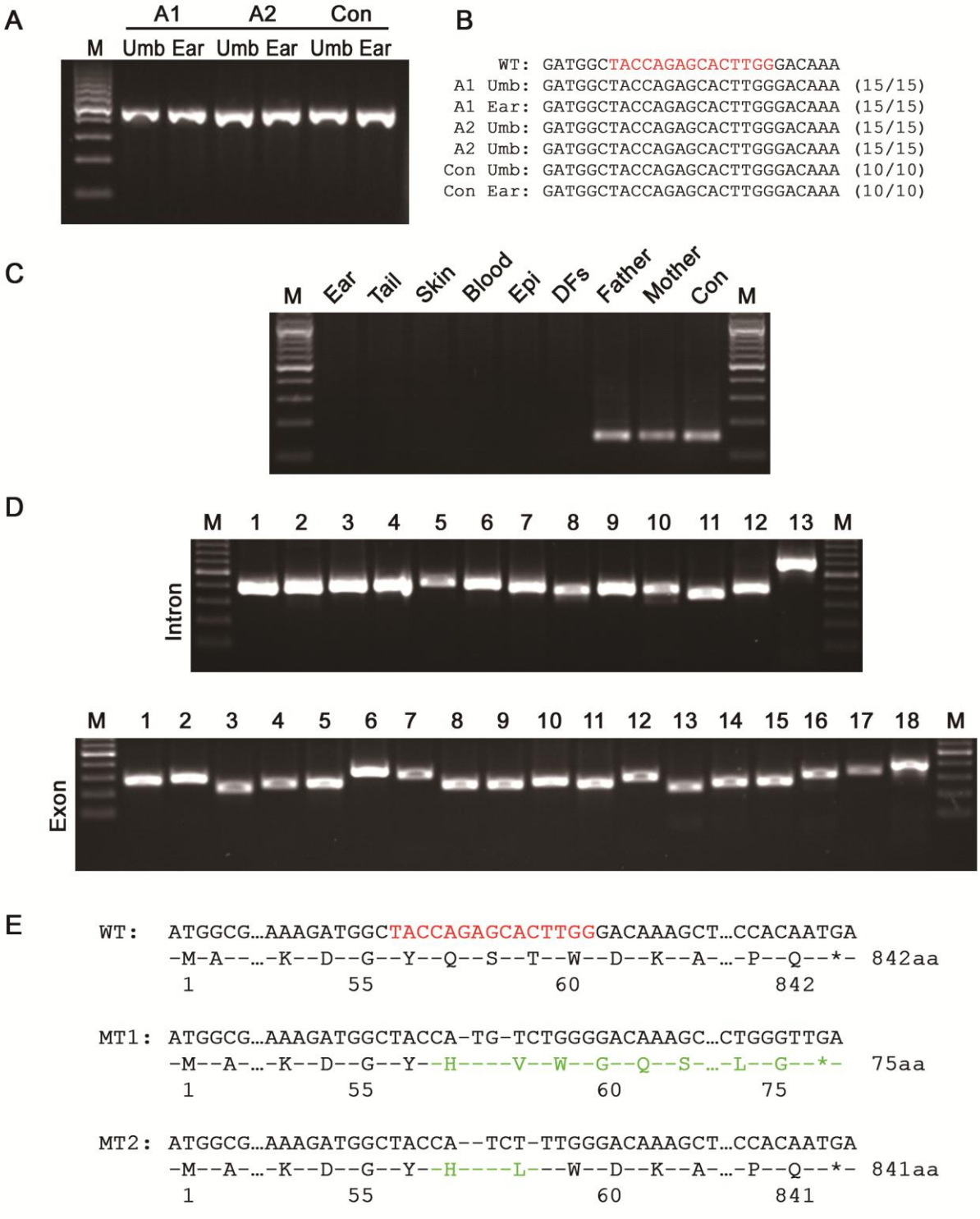

Figure S2. Genotype analysis of the twins' monkey and the *MCPH1*-mutant monkey

(A) T7EN1 assays were performed on samples obtained from the twins' monkey and wild-type monkey.

(B) Sanger sequencing was performed on PCR products amplified from tissues of the twins' monkey. The targeting site is highlighted in red.

(C) Allele-specific PCR failed to detect the wild-type allele in all six tissue samples collected from the *MCPH1*$^{mt/mt}$ monkey.

(D) T7EN1 assay testing potential OTS of *MCPH1*-T2 in intronic and exonic loci of the *MCPH1*$^{mt/mt}$ monkey.

(E) The targeting sequence is shown in red and the amino acid changes are shown in green. The predicted protein size is presented on the right of each protein. The numbers show the position of the mutated amino acids.

Abbreviations: M, marker; A1 and A2, twins monkey; Con, Con1 and Con2, wild-type monkey; Umb, umbilical cord; Epi, oral epithelium; DFs, dermal fibroblasts; WT, wild-type allele; MT1 and MT2, the two introduced mutations.