



Figure S1 Examples of 2 wild-type and 12 founder mice screened with a fluorescently labeled PCR product. WT *Tyr* allele products are indicated (green arrowhead) as well as mutant *Tyr* alleles confirmed by deep sequencing of an independent PCR product (red *). For mutant alleles, the size of each allele relative to wild-type is indicated along with the percentage of sequencing reads. Note that founder 11.6 lacks a wild-type allele. Upon sequencing, we determined that the single -7bp peak in founder 9.6 was actually a mix of two different -7bp mutant alleles. Similarly, the -11bp peak in founder 9.9 contained two different -11bp mutant alleles.