



Figure S2. Example of SNP validation by sequencing (**A**) and SNaPshot (**B**). In **A**, a proprietary sequencing file was generated by a ABI sequencer and analyzed by Sequencing Analysis software (Applied Biosystems, Foster City, CA) to generate the sequence and electrophoregram, in which the validated SNP was confirmed by visualization of overlapping of the two nucleotides (C/T) at the SNP site and alignment of its SBE primer sequence. In **B**, a SNaPshot chromatogram of a SNP validated by the assay was generated by GeneMarker (SoftGenetics, State College, PA), revealing the two nucleotides (A/G) at the SNP site. The y-axis represents the intensity of, and x-axis the approximate length of, the fluorescently-labeled SBE products ending with A and G.