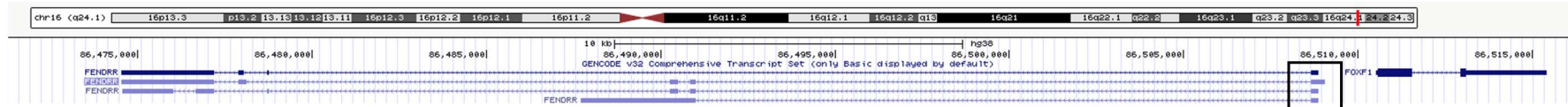
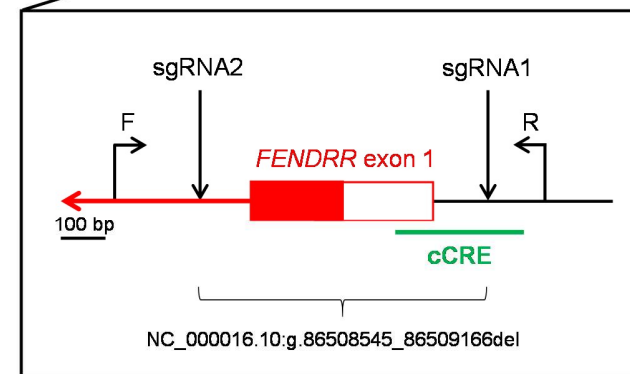
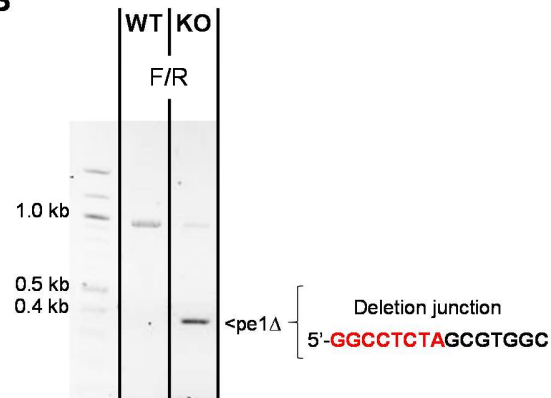


A**B**

Additional file 3. CRISPR/Cas9 knockout of *FENDRR* in IMR-90 cell line in IMR-90 cell line. **A)** Schematic representation of the *FENDRR* locus and CRISPR/Cas9-mediated *FENDRR* knockout strategy. Red box represents *FENDRR* exon 1; white box represents maximal 5' extension of the exon 1, caused by alternative splicing, that is present in Gencode transcript *FENDRR-206* (ENST00000599749.5). F and R indicate primers (F: 5'-GAAAATGAAGGCGTCCGAGC, R: 5'-GCACATGCAAACCCGGTAAA) used in PCR amplification from normal (WT) and edited (KO) lung fibroblasts IMR-90. **B)** Agarose gel electrophoresis of PCR products that verified promoter-exon 1 deletion (Δ). There was a minor heterogeneity with respect to the exact position of each of the deletion breakpoints. Sequence through the deletion junction and deletion coordinates refer to the predominant deletion (a small fraction of the deletions was 2 to 4 nt shorter). cCRE abbreviates *FENDRR* putative promoter (ENCODE).