

Title: Supplementary Data 1.

Description: *List of cell lines and genes present in both AVANA and Achilles, which has been used in this study.*

Title: Supplementary Data 2.

Description: CDE+ and CDE- genes and their enriched pathways

Title: Supplementary Data 3.

Description: *Chromosomal common fragile sites (CFSs) enrichment analysis*

Title: Supplementary Data 4:

Description: sgRNA sequence in competition assay

Title: Supplementary Data 5.

Description: *Fisher test significance of candidates from Vogelstein et al. which are mutated in at least 10 samples*

Title: Supplementary Data 6.

Description: *List of overlapping CDE+ genes across p53 and KRAS*

Title: Supplementary Data 7.

Description: *CRISPR-KO and CRISPRi screens of CDE genes in KRAS isogenic MOLM13 cell lines*

Title: Supplementary Data 8.

Description: *Competition assay of KRAS isogenic MOLM13 cells under CRISPR-KO of CDE genes*

Title: Supplementary Data 9.

Description: *Primer Sequences used in the study*