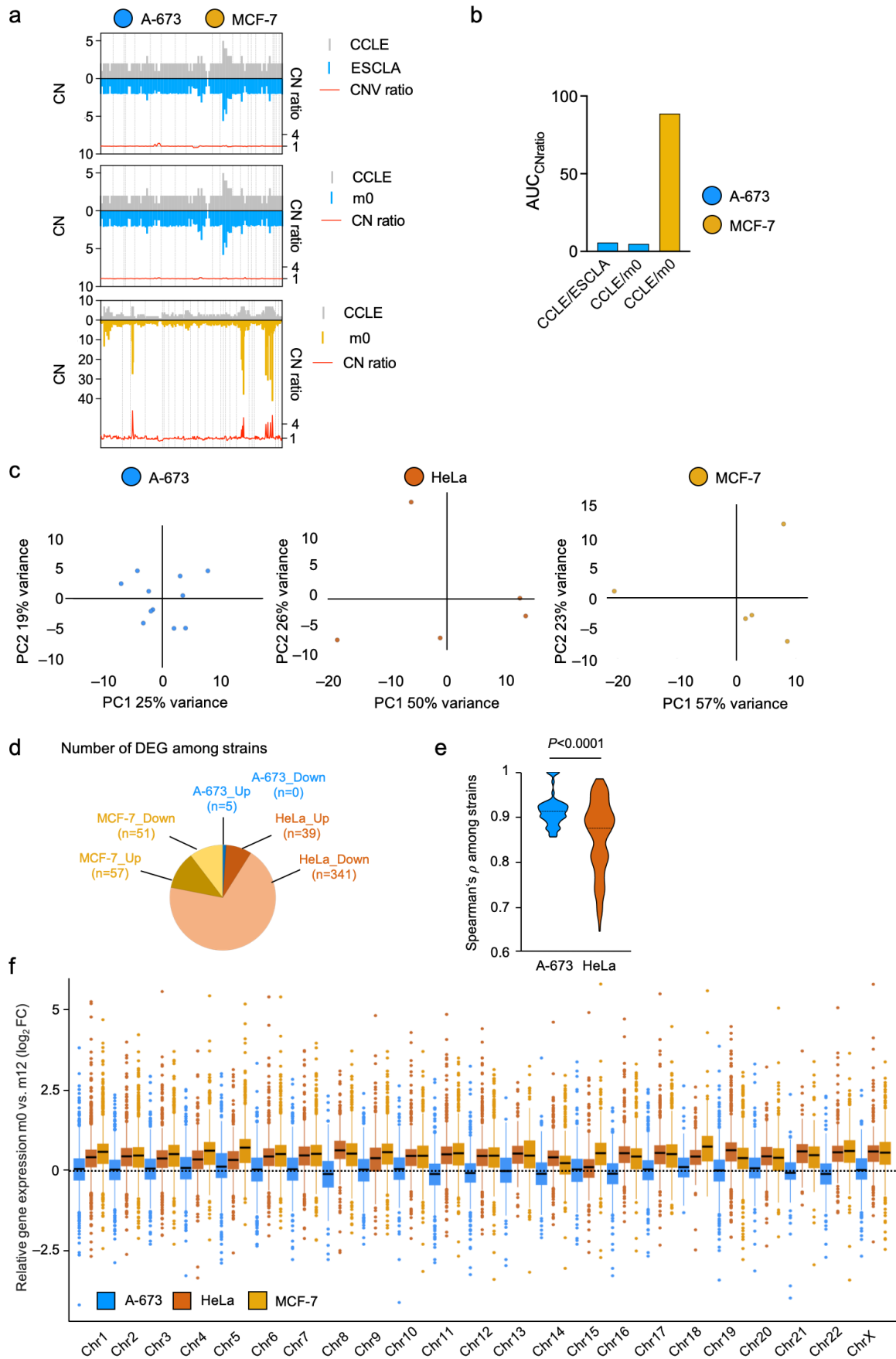
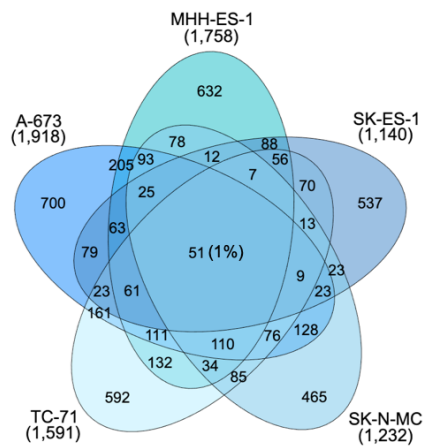


SUPPLEMENTARY FIGURES

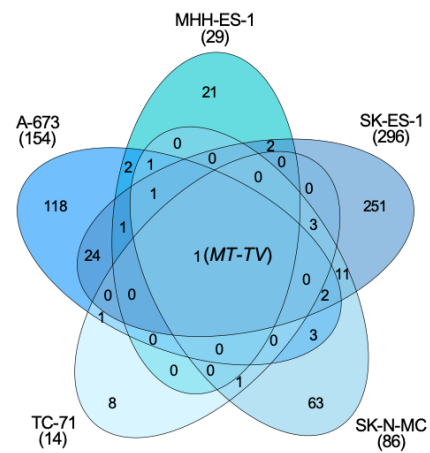


Supp. Fig. 1 | Fusion-driven pediatric sarcoma cell line strains display stable and homogenous genomes and transcriptomes. **a.** Mirror plot shows total copy number (CN) (y-axis, left) and CN ratio (y-axis, right) across the genome of A-673 or MCF-7 cell strains. The grey bars represent the total CN derived from the Cancer Cell Line Encyclopedia (CCLE) (A-673 and MCF-7 strains). The blue bars represent the total CN estimated from Whole Genome Sequencing (WGS) data processed using the ACEseq algorithm from BioProject PRJNA610192 (ESCLA), A-673_m0, or MCF-7_m0. The red line denotes the CN ratio ($WGS_{CN}/CCLE_{CN}$). The x-axis represents chromosomal positions across the genome. Vertical gray dotted lines indicate chromosome limits. **b.** Plot shows area under the curve for each calculated CN ratio in a. for A-673 (blue) or MCF-7 (yellow) **c.** Independent PCA of 11 A-673, five HeLa, and five MCF-7 strains. Axes depict the variance percentages across each cell line's strains. **d.** Pie chart depicts the number of up- and down-regulated DEG emerging from each comparison. **e.** Gene-specific Spearman's ρ across A-673 and HeLa cell line strains from the combined transcriptomic datasets in Fig 1f. Dotted black lines show the median (one-sided Wilcoxon rank-sum test). **f.** Relative gene expression of A-673, HeLa, and MCF-7 cell lines after long-term culture for twelve months (m12 vs m0) per chromosome. Boxplots display the interquartile range and the mean.

a Overlap of DMPs across EwS cell lines



b Overlap (#) of DEGs across EwS cell lines



Supp. Fig. 2 | In-depth analysis of stability on individual EwS cell lines. **a.** Venn diagram displaying the overlap in differentially methylated CpG sites across all EwS cell lines after 12 months in continuous culture (m12/m0). **b.** Venn diagram displaying the overlap in differentially expressed genes across all EwS cell lines after 12 months in continuous culture (m12/m0).