Expanded View Figures

Figure EV1. Analysis of *PALB2* mutation in PDX093; RAD51 assay scoring and validation.

A   Sanger sequencing reverse plots of DNA and RNA from PDX093 showing 1 nt (T) insertion in one *PALB2* allele (*PALB2* c.886dupA).

B   Flow diagram of the RAD51 scoring criteria and quality controls.

C   Quantification of geminin-positive cells with RAD51 foci (Mann–Whitney *U*-test) following treatment with vehicle and olaparib in PARPi-sensitive (CR/PR) versus PARPi-resistant (PD) PDXs.

D   Pearson correlation between the RAD51 score (percentage of RAD51 (+)/Geminin (+) cells, assessed in untreated FFPE tumor samples) and the percentage of tumor volume change in olaparib-treated tumors from PDX cohort-1. Each dot represents one PDX model. Error bars indicate SEM from independent tumors ($n \geq 3$) treated with olaparib.

E   Quantification of geminin-positive cells (paired *t*-test in vehicle- versus olaparib-treated tumors; unpaired *t*-test in CR/PR versus PD tumors) following treatment with vehicle and olaparib in PARPi-sensitive (CR/PR) versus PARPi-resistant (PD) PDXs.

F   Spearman correlation of the percentage of RAD51 (+)/Geminin (+) cells in PDX cohort-1 assessed with two different antibodies against RAD51 both in vehicle- and olaparib-treated PDX samples.
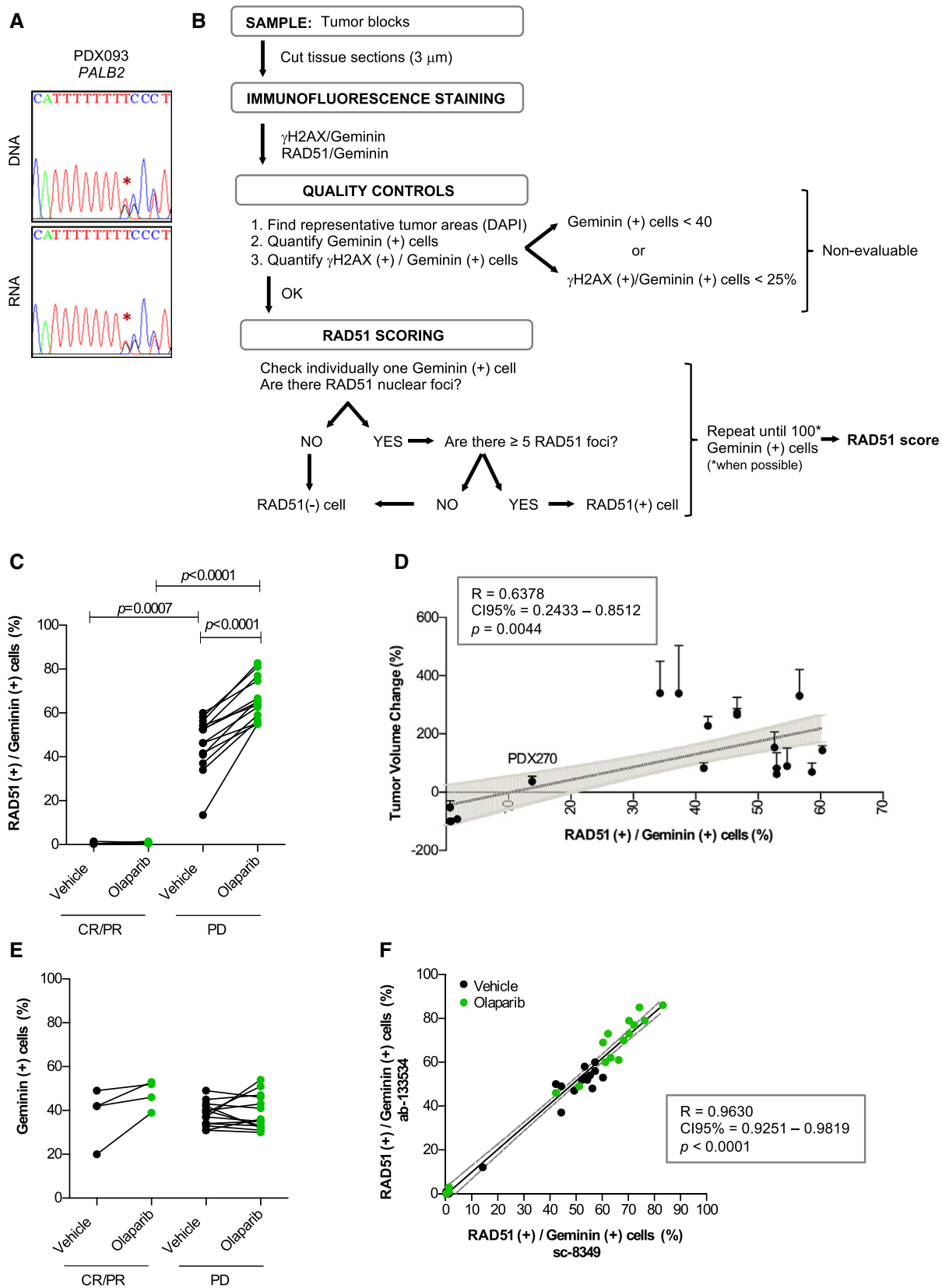
Figure EV1.