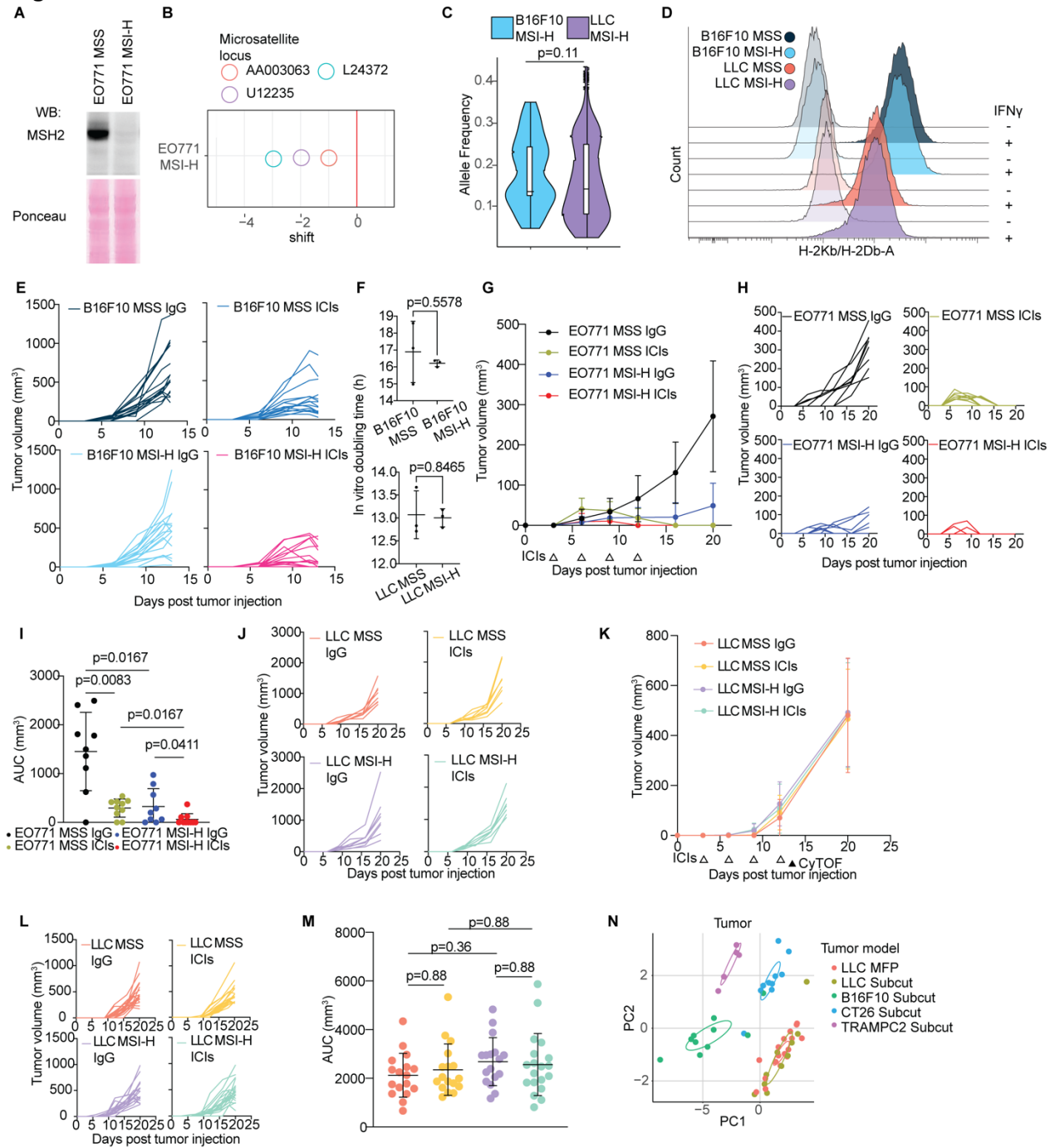


**Figure S2**



## Supplementary Figure S2.

**A**, Western blot of MSH2 protein in EO771 MSS vs. MSI-H cell line whole cell lysates. Representative of two independent experiments. **B**, Targeted microsatellite PCR assay comparing amplicon size at indicated loci for the EO771 MSI-H vs. MSS cell line. Representative of two independent experiments. **C**, Box and violin plots of neoepitope allele frequencies in indicated cell lines. Two-tailed p value by Mann-Whitney test. Box plot: center line, median; box limits, upper and lower quartiles; whiskers, 1.5x interquartile range. **D**, Quantification of H-2Kb or H-2Db expression by flow cytometry of indicated cell lines *in vitro* and treated with or without IFN $\gamma$  (62.5 ng/mL for 48 hours). Representative plot from two independent experiments with n=3 each. **E**, Growth curves for individual mice shown in **Fig. 1F and G**. **F**, Cell doubling times *in vitro* for the indicated cell lines, n=3, representative of two independent experiments. Two-tailed p values by t test. **G and H**, Quantification of mean and individual mouse volumes for EO771 MSS or MSI-H tumors treated with or without anti-PD1 and anti-CTLA4 antibodies (ICIs) at the indicated timepoints (arrowheads). n=9-10 mice per condition from two independent experiments. **I**, Quantification of area under curve (AUC) for the experiment shown in **G and H**. **J**, Growth curves for individual mice with subcutaneous LLC tumors shown in **Fig. 1H and I**. **K**, Quantification of mean volumes and area under curves (AUC) for LLC mammary fat pad tumors treated with or without anti-PD1 and anti-CTLA4 antibodies (ICIs) at the indicated timepoints (white arrowhead). Black arrowhead denotes timepoint for sample collection for CyTOF analysis. n=17-19 mice per condition from four independent experiments. Two-tailed adjusted p value by Mann-Whitney test. **L**, Growth curves for individual mice shown in **(K)**. **M**, Quantification of AUC for the experiment shown in **(K)**. **N**, Principal component analysis of manually gated intratumoral immune cell frequencies as percent of singlets in tumor for the indicated tumor types and site of implantation. MFP, mammary fat pad. Subcut, subcutaneous. 95% confidence ellipses are shown. Two-tailed p value by Mann-Whitney tests. For all applicable panels, error bars represent mean  $\pm$  SD.