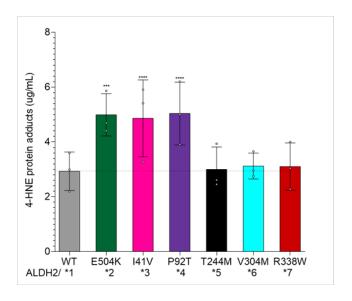
A Cellular toxicity

200 (150 %) 9100 WT E504K I41V P92T T244M V304M R338W ALDH2/*1 *2 *3 *4 *5 *6 *7

B 4-HNE protein adducts



C Cellular ATP – Ethanol sensitivity

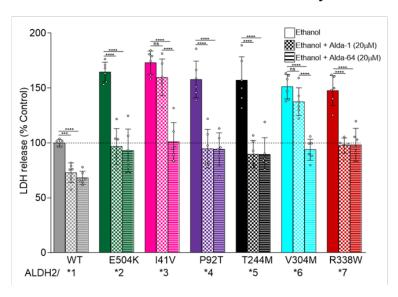


Fig S1. Human-derived fibroblasts overexpressing novel ALDH2 mutant are sensitive to ethanol

toxicity. (A) Lactate dehydrogenase activity in supernatant in transiently transfected human-derived fibroblasts (n=6); Mean, standard deviation, probability by one-way ANOVA (with Fischer's LSD post hoc test) **** p-value <.0001; *** p-value <.001; (B) 4-HNE protein adducts in transiently transfected human-derived fibroblasts (n=3); Mean, standard deviation, probability by one-way ANOVA (with Fischer's LSD post hoc test) *** p-value <.001. (C) Lactate dehydrogenase activity in supernatant in transiently transfected human-derived fibroblasts in the presence or absence of Alda-1/ Alda-64 (20 μM/24 h; 50 mM Ethanol) (n=6); Mean, standard deviation, probability by one-way ANOVA (with Fischer's LSD post hoc test) **** p-value <.0001; *** p-value <.001.