TRUE SAE Diamond Features → DDR_bin Pathway Mapping

9 resistance-elevated features all map to DNA Damage Repair pathway

Feature Index	Effect Size	Top Genes (variant count)
27607	d=0.64 p=0.015	TP53(28), UBAP2L(1), ENTPD3(1)
16337	d=0.63 p=0.025	TP53(25), MYH1(2), CDH10(1)
26220	d=0.61 p=0.022	TP53(28), ENTPD3(1), ADAP2(1)
12893	d=0.60 p=0.025	TP53(29), RDH5(1)
6020	d=0.57 p=0.032	TP53(29), RDH5(1)
22868	d=0.54 p=0.036	TP53(30)
1407	d=0.54 p=0.041	TP53(25), BLMH(1), NPR2(1)
9738	d=0.53 p=0.049	TP53(24), RDH5(1), ENTPD3(1)
31362	d=0.52 p=0.047	TP53(28)

DDR_bin

DNA Damage Repair

Summary Statistics:
• 9 diamond features (higher in resistant)
• All features map to DDR pathway
• TP53 dominant: 28/30 top variants
• Mean Cohen's d: 0.58
• All p < 0.05 (Mann-Whitney U)