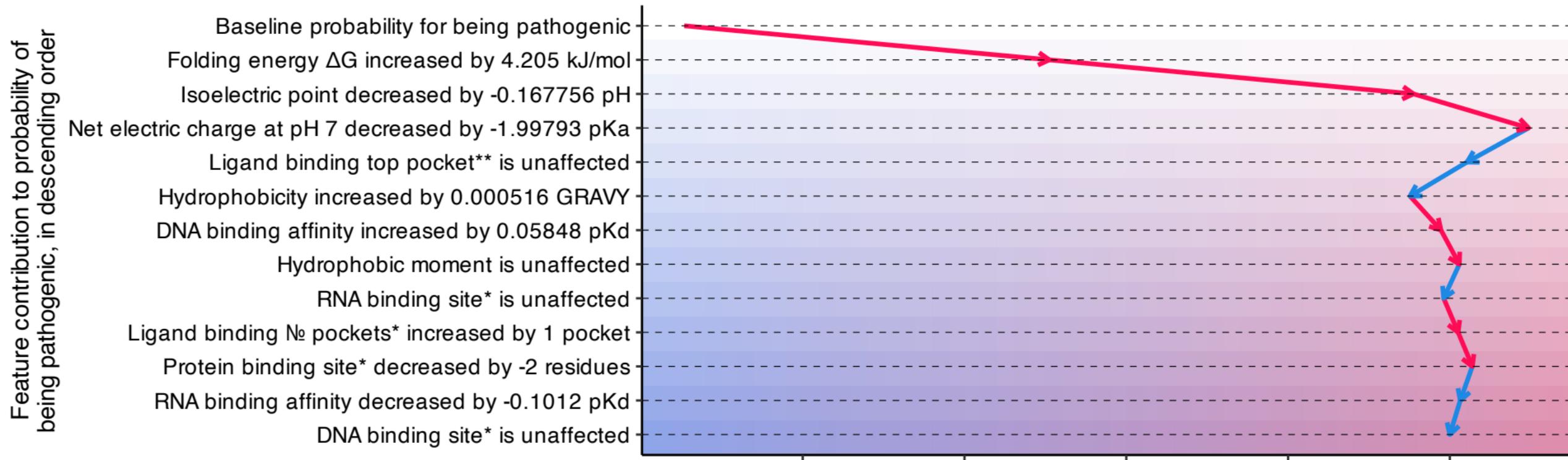# DAVE1 decision plot for KA771E in gene ECEL1 (O95672), GRCh38 2:232480170T>C, VKGL April 2024: VUS

SHAP values do not correlate with feature values, but instead capture feature contributions based on the interactions among all features uniquely for this prediction

Feature contribution to probability of being pathogenic, in descending order

- Baseline probability for being pathogenic
- Folding energy ΔG increased by 4.205 kJ/mol
- Isoelectric point decreased by -0.167756 pH
- Net electric charge at pH 7 decreased by -1.99793 pKa
- Ligand binding top pocket** is unaffected
- Hydrophobicity increased by 0.000516 GRAVY
- DNA binding affinity increased by 0.05848 pKd
- Hydrophobic moment is unaffected
- RNA binding site* is unaffected
- Ligand binding № pockets* increased by 1 pocket
- Protein binding site* decreased by -2 residues
- RNA binding affinity decreased by -0.1012 pKd
- DNA binding site* is unaffected

Cumulative probability heuristic for SHAP values

* = if any, one or more   ** = if any

Final probability for being pathogenic is 0.7, variant is estimated to be pathogenic