

Figure S5) Mutation: "peptide to charged amino acid". Size, N: 178. Correlation, $z = 0.253382177853 \pm 0.0755928946018$

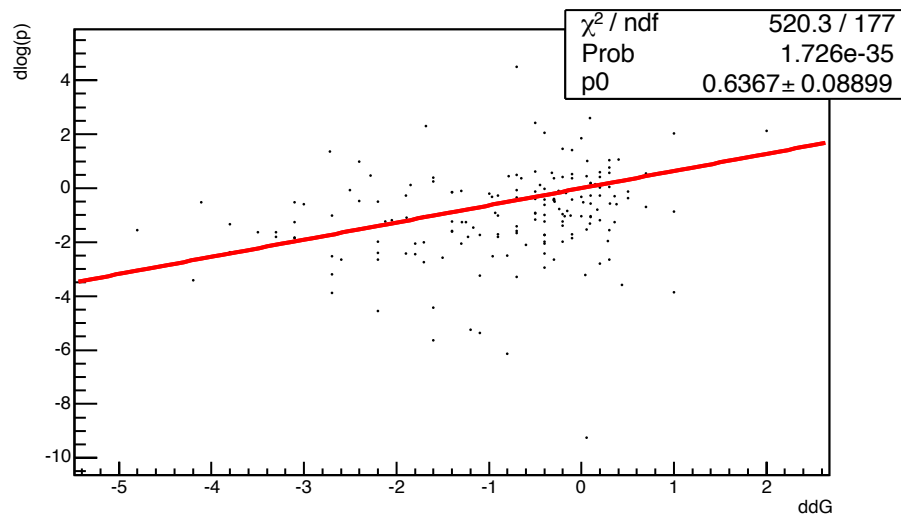


Figure S6) Mutation: "charged to peptide amino acid". Size, N: 50. Correlation, $z = 0.650311000122 \pm 0.145864991498$

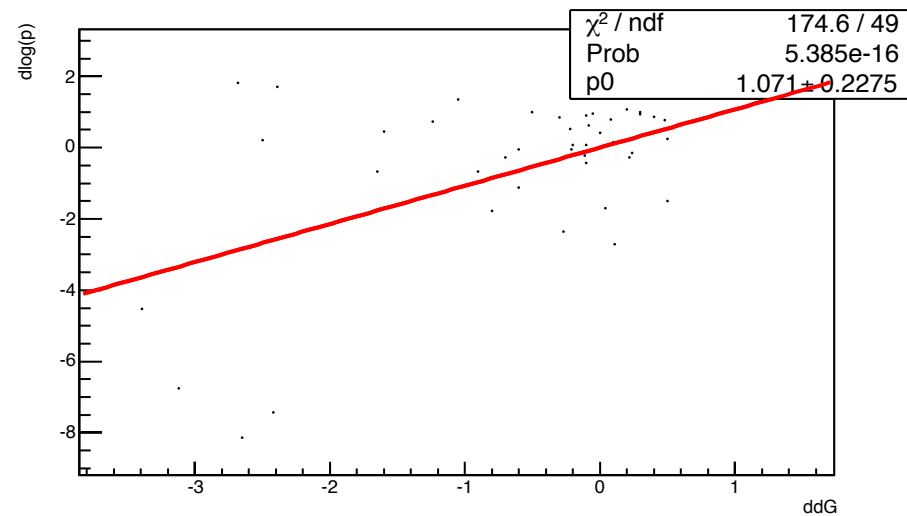


Figure S7) hydrophobic. Size, N: 271. Correlation, $z = 0.22258859768 \pm 0.0610847221782$

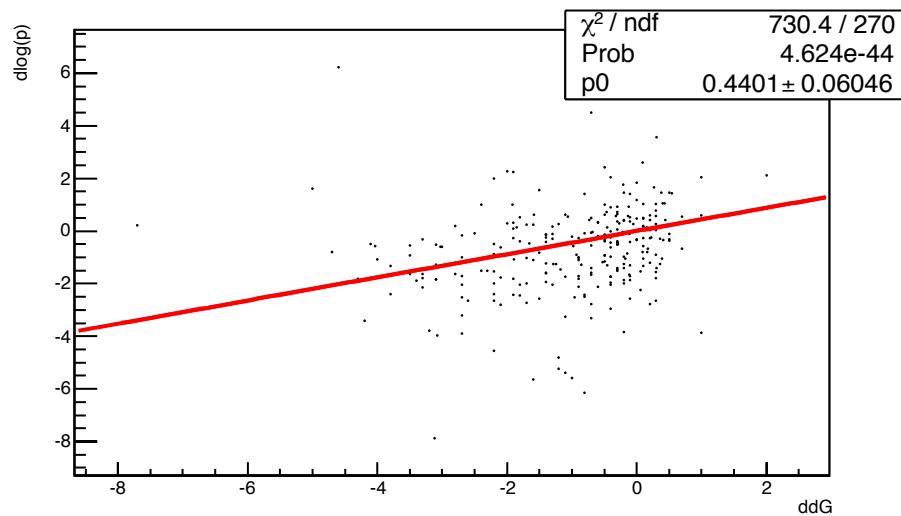


Figure S8) polar. Size, N: 98. Correlation, $z = 0.148763263534 \pm 0.102597835209$

