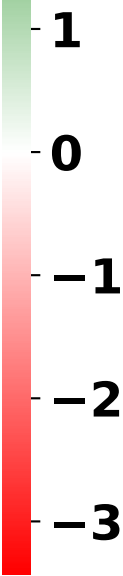


Variation of Free Gibbs Energy

Mutations

| | | | | | | | | | | | | | | | | | | | |
|-------|-------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| G67V | G67R | G73R | I104S | G87R | I104N | Y136S | V52G | V50G | G103R | G77R | W61L | R54G | Y134C | C30R | R54T | E81G | L75Q | T79R | D38E |
| F84S | D38G | L75P | L32P | D58V | A65D | A39D | V48S | D58A | F64S | Y134S | E62D | L75R | S97Y | P133T | D59V | S97F | G67E | E74D | A56D |
| I104T | T69I | E92G | E74G | E62G | G87E | P44S | E74L | P145S | H110N | D38N | A101V | A56P | P122R | V91A | V114A | V52A | R124H | V50A | K55N |
| K90N | Y134H | A129V | V142A | G73E | T79K | R123S | S43N | L78H | R124C | Y89H | F53C | I127V | E71G | H108R | I93V | V40I | G67A | Y89I | H76R |
| V142I | S70R | E74K | E81K | T80A | A129T | M33I | T69P | S70I | D94H | T139M | T69A | T69S | L131M | A65T | K55T | G121S | A45T | A129S | E74Q |
| A111S | A140S | A117S | A45S | S72P | A117G | E109Q | A65G | A101T | E112K | H110D | A65S | S132I | G73A | R41Q | V50L | E109K | F53I | F53L | V50M |
| I127M | I127F | V48M | F64L | F53V | L78R | Y98F | F64Y | V113M | I88L | F84L | E82K | F84I | | | | | | | |



ΔG difference from WT)