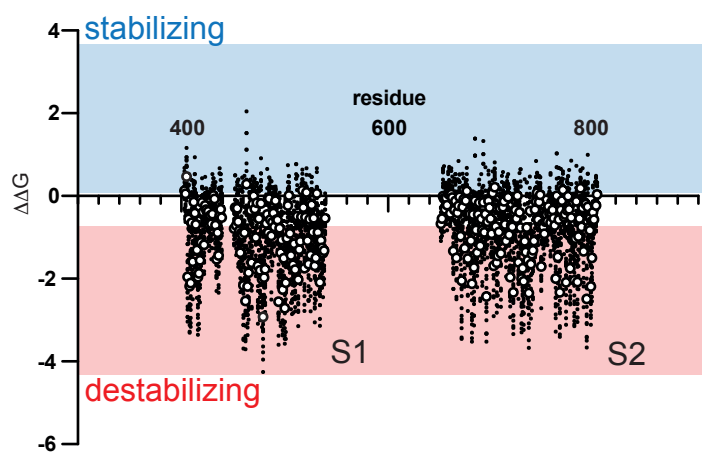
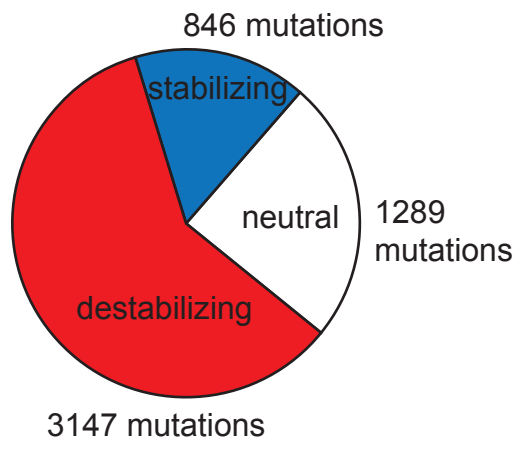


a



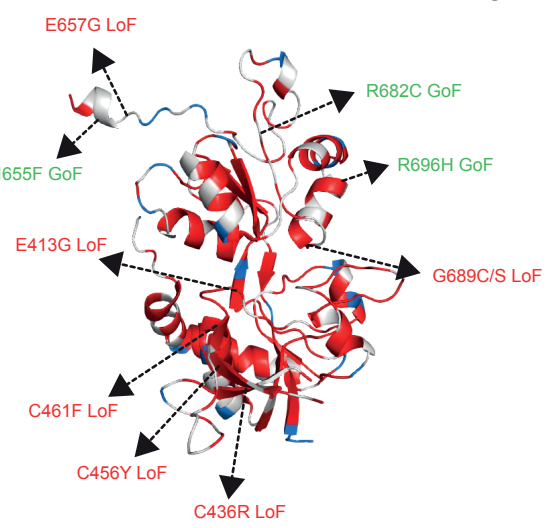
b



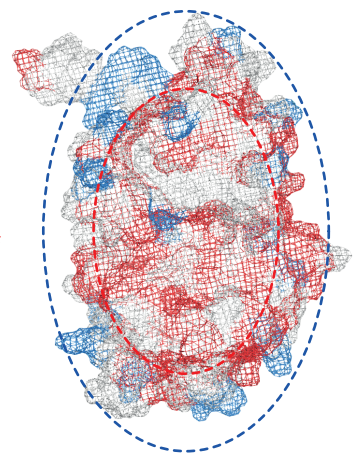
c

| Mutation | Functional output | EC ₅₀ (μM) | ΔΔG | Comment |
|----------|-------------------|-----------------------|--------|---------|
| C436R | LOF | 1 | -1.505 | |
| R696H | GOF | 0.33 | -1.486 | |
| G689C | LOF | 1100 | -1.42 | |
| G689S | LOF | 1800 | -1.355 | |
| M706V | neither | 1.5 | -1.15 | |
| E413G | LOF | 79 | -1.054 | |
| C461F | LOF | 169 | -0.86 | |
| E657G | LOF | 0.7 | -0.828 | |
| C456Y | LOF | 0.39 | -0.804 | |
| C456Y | LOF | | -0.804 | |
| R682C | GOF | 0.91 | -0.703 | |
| I655F | GOF | 5.6 | -0.641 | |
| Q656 | LOF | | - | stop |
| G724 | LOF | | - | stop |
| R519 | LOF | | - | stop |
| D786M | LOF | | - | stop |

d



e



f

