

Table S1. Mass spectrometric characterization of YfdE and UctC.

| Sample | Observed (Da) | Expected ^a (Da) |
|------------|---------------|----------------------------|
| H6YfdE | 43,702 | 43,703 |
| YfdEH6 | 42,822 | 42,823 ^b |
| | 43,569 | 43,571 ^{b,c} |
| UctC | 41,708 | 41,709 ^d |
| UctC-D177A | 41,664 | 41,665 ^d |

^a Computed assuming that Met1 is removed, except as noted.

^b Retains Met1.

^c Aspartyl-CoA thioester adduct.

^d Thr2→Ala mutant.