**Supplemental Table 2. Isothermal Titration Calorimetry of Ub binding with CCHFV OTU-wt and OTU-C40A**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Protein** | **N***a* | **KD** | **ΔH***b* | **ΔG***c* | **-TΔS***d* |
|   | (sites) | (μM) | (kJ/mol) | (kJ/mol) | (kJ/mol) |
| CCHFV OTU-wt*e* | 1.22 ± 0.02 | 8.09 ± 1.86 | 22.00± 1.48 | -29.13 ± 0.58 | -51.10 ± 0.79 |
| CCHFV OTU-C40A*e* | 1.18 ± 0.07 | 8.57 ± 4.08 | -4.31 ± 0.21 | -29.17 ± 1.39 | -24.87 ± 1.16 |

*a* Binding stoichiometry. *b* Binding enthalpy. *c* Gibb’s free energy. *d* Entropy factor.

 *e* Average from n=3 with error calculated using the standard deviation

**Supplemental Table 2. Isothermal titration calorimetry of Ub with CCHFV OTU-wt and OTU-C40A.** Untagged Ub was purified as previously described (Eisenmesser 2015 *Protein Science*). CCHFV OTU-wt, OTU-C40A, and Ub were dialyzed into 100 mM NaCl, 50 mM HEPES (pH 7.5), 1 mM TCEP overnight at 4ºC. ITC was performed using a Microcal PEAQ-ITC (Malvern, Worcestershire, United Kingdom) using a series of 19 injections, 2 μl each, with a spacing of 150 seconds between injections. Measurements were run at a constant temperature of 25ºC with a reference power of 25-33.5 μW. For OTU-wt measurements with Ub, the OTU was present in the cell at 270-274 μM and Ub at 2.77-2.81 mM Ub in the syringe. OTU-C40A measurements with Ub were performed with 447-466 μM OTU in the cell and 6.24-6.29 mM Ub in the syringe. Three independent experiments were run for each, and the data was processed in the Microcal PEAQ-ITC analysis software.