

**Supplementary information, Table S4** Isothermal Titration Calorimetry (ITC) with 0.88mM

H3 peptide in syringe and various PHD<sub>UHRF1</sub> mutations in cell using VP-ITC

ID	Protein in cell	Protein concentration (mM)	N	Ka (M <sup>-1</sup> )	Kd (μM)	Δ H (cal/mol)	Δ S (cal/mol/deg)
1	PHD WT	0.05	1.07±0.00398	1.62E6±1.04E5	0.62	-5026±27.94	10.7
2	D347A	0.05	0.748±0.104	5.24E4±1.45E4	19.1	-904.4±160.3	18.4
3	E370A	0.05	0.971±0.00434	8.14E5±4.08E4	1.23	-4822±29.87	10.0
4	D350A	0.04	0.991±0.0455	8.33E4±9.97E4	12	-5876±350.2	1.76