

Supplementary Materials:

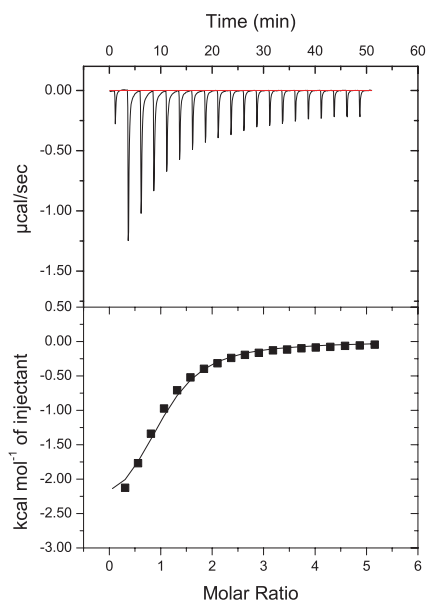
Supplementary Figure 1. ITC measurement of the interaction between the BRPF1 bromodomain and the histone H2AK5ac ligand. Exothermic ITC enthalpy plots for the binding of the wild type (WT) and mutant BRPF1 bromodomain proteins with H2AK5ac peptides. (A) H2AK5ac titrated into the WT BRPF1 bromodomain protein. (B) N83A (C) F89A (D) E36A (E) C79A (F) I88A (G) A84S (H) ITC heat of dilution showing the background of titrating the histone H2AK5ac peptide into buffer.

Supplementary Figure 2. ITC measurement of the interaction between the BRPF1 bromodomain and the histone H4K12ac ligand. Exothermic ITC enthalpy plots for the binding of the wild type (WT) and mutant BRPF1 bromodomain proteins with H4K12ac peptides. (A) H4K12ac titrated into the WT BRPF1 bromodomain protein. (B) N83A (C) F89A (D) E36A (E) C79A (F) I88A (G) A84S (H) ITC heat of dilution showing the background of titrating the histone H4K12ac peptide into buffer.

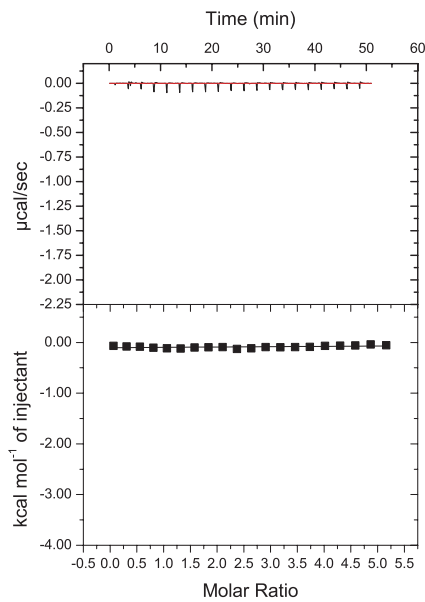
Supplementary Figure 3. ITC measurement of the interaction between the BRPF1 bromodomain and the histone H4 unmodified ligand. Exothermic ITC enthalpy plots for the binding of the wild type (WT) and mutant BRPF1 bromodomain proteins with H4 unmodified peptides. (A) H4 unmodified titrated into the WT BRPF1 bromodomain protein. (B) N83A (C) F89A (D) E36A (E) C79A (F) I88A (G) A84S (H) ITC heat of dilution showing the background of titrating the histone H4 unmodified peptide into buffer.

Supplementary Figure 1

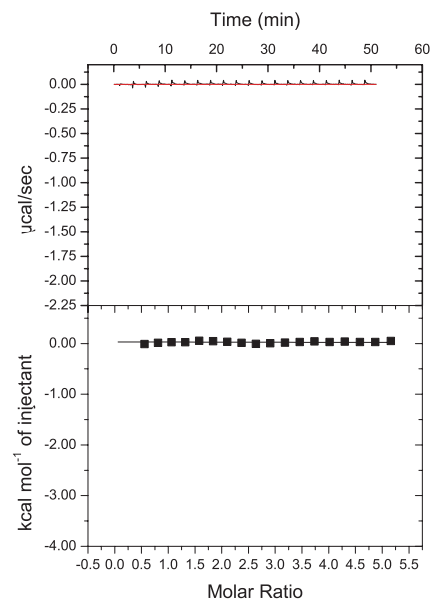
A. WT BRPF1 bromodomain



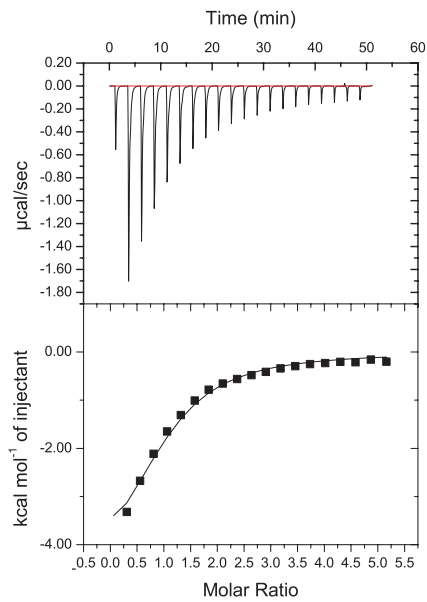
B. N83A



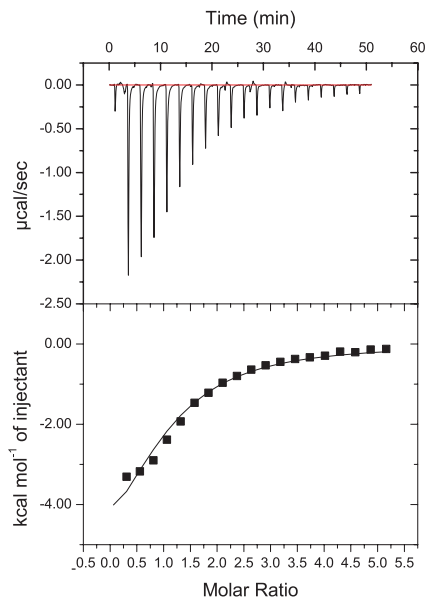
C. F89A



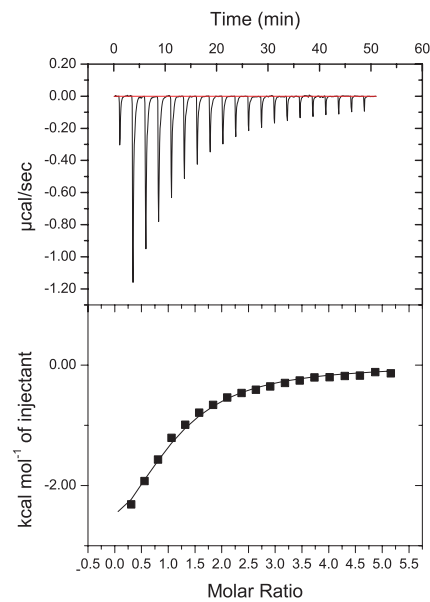
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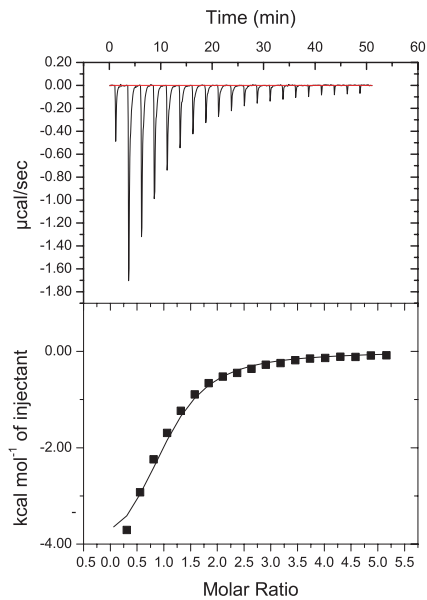
E. C79A



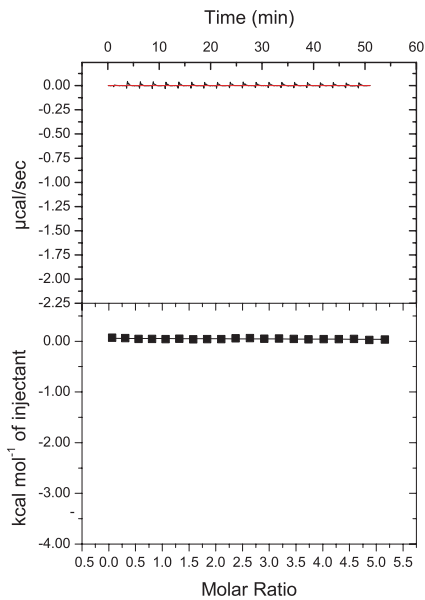
F. I88A



G. A84S

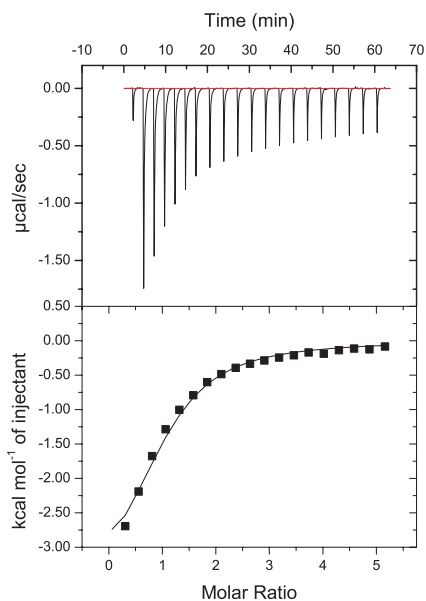


H. H2AK5ac into buffer (Tris)

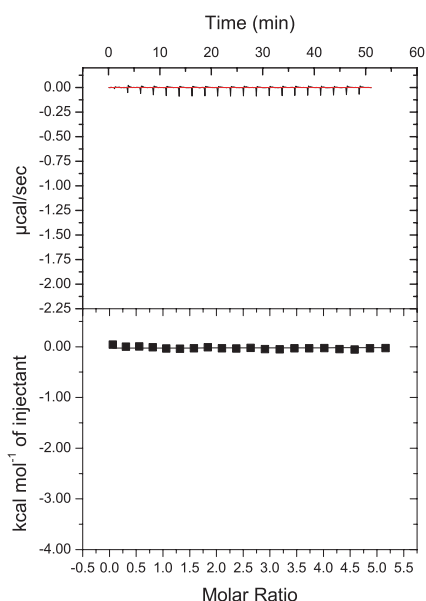


Supplementary Figure 2

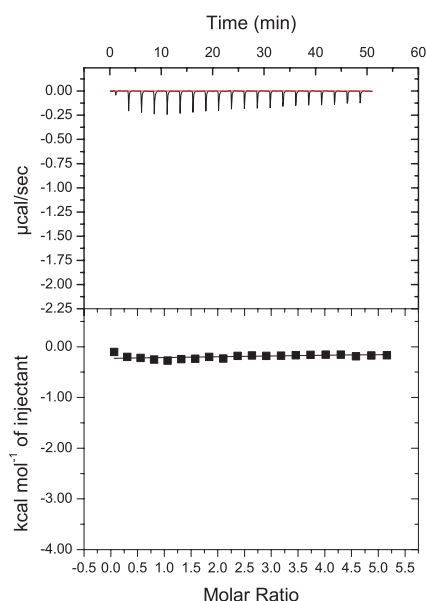
A. WT BRPF1 bromodomain



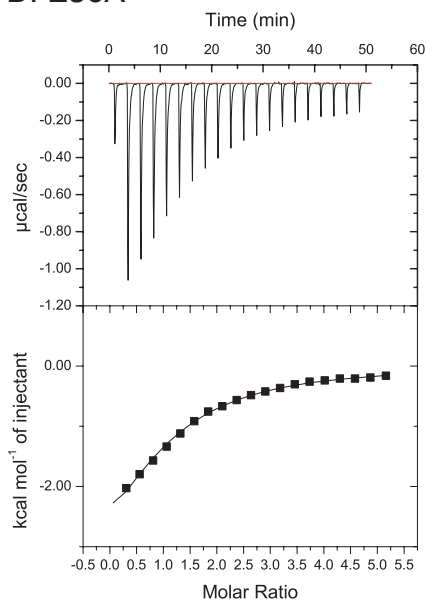
B. N83A



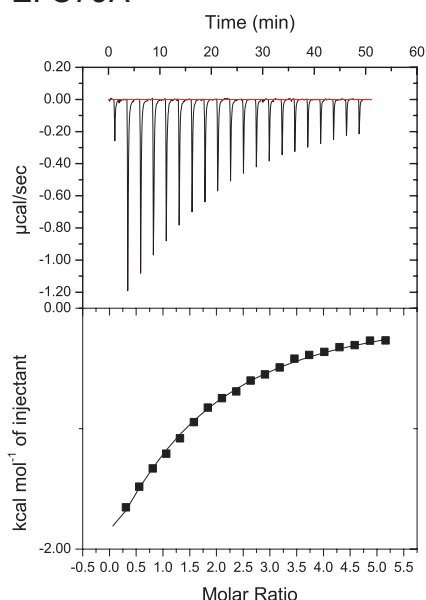
C. F89A



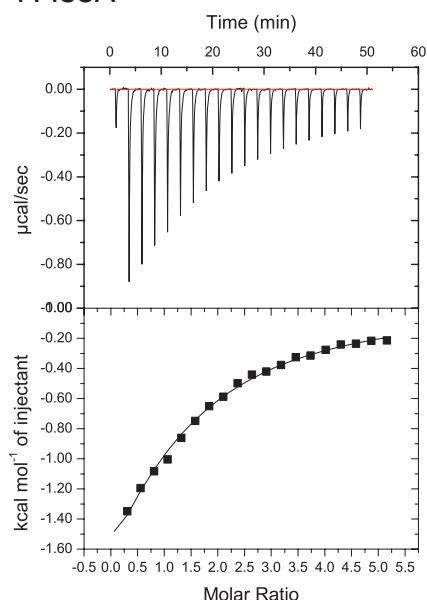
D. E36A



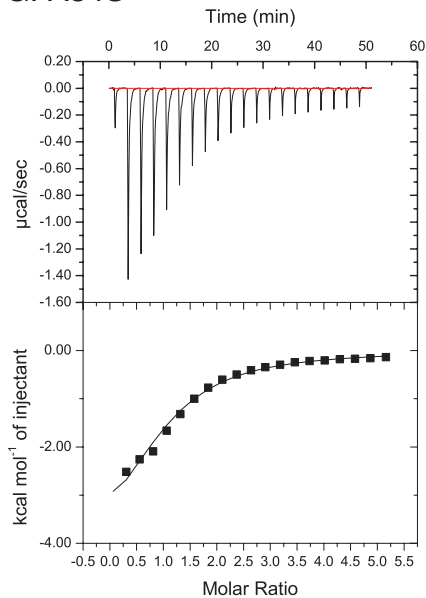
E. C79A



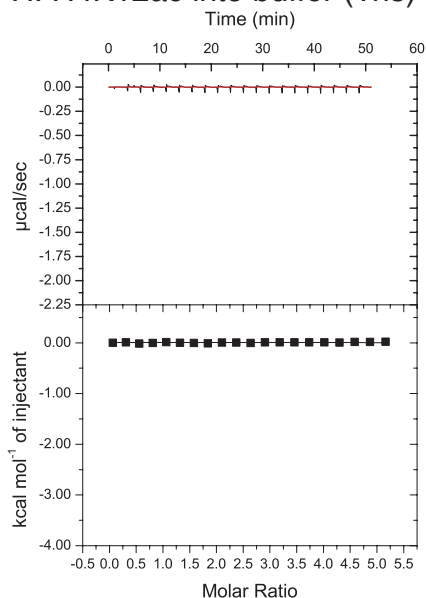
F. I88A



G. A84S

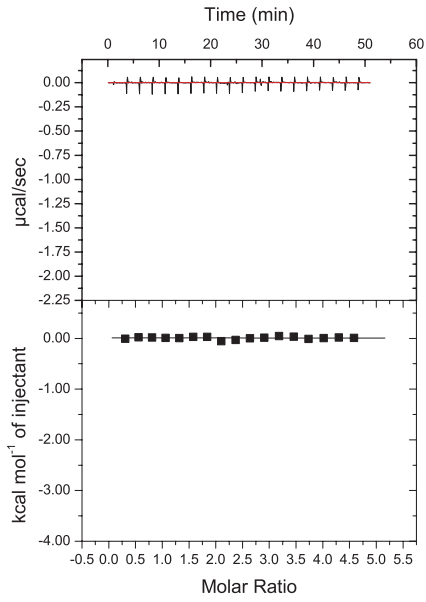


H. H4K12ac into buffer (Tris)

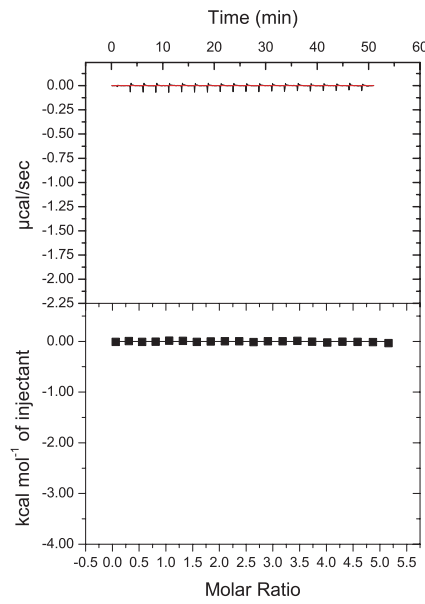


Supplementary Figure 3

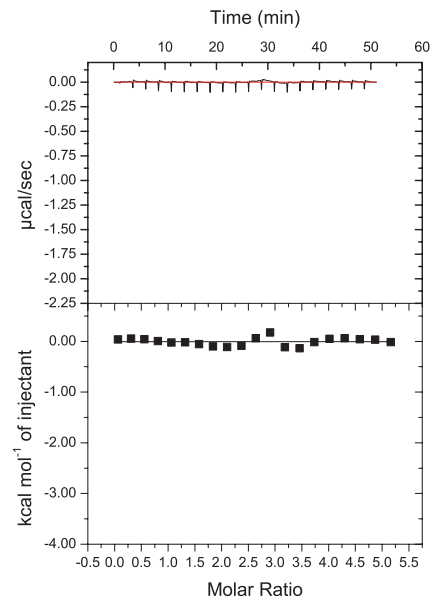
A. WT BRPF1 bromodomain



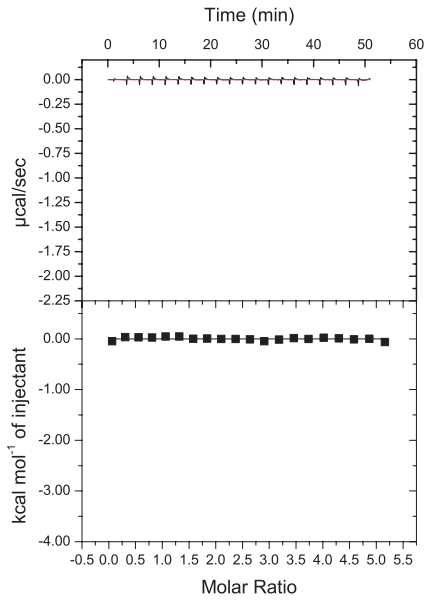
B. N83A



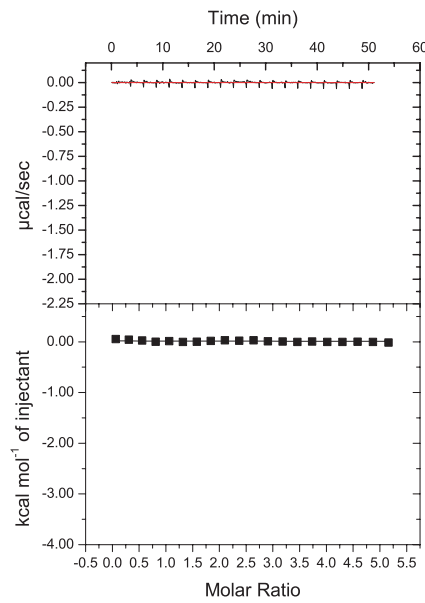
C. F89A



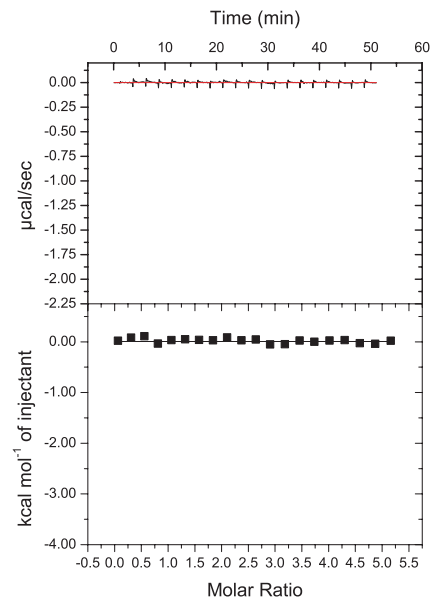
D. E36A



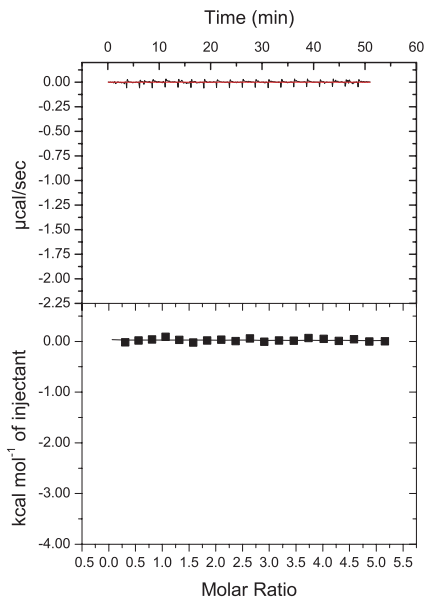
E. C79A



F. I88A



G. A84S



H. H4 unmodified into buffer (Tris)

