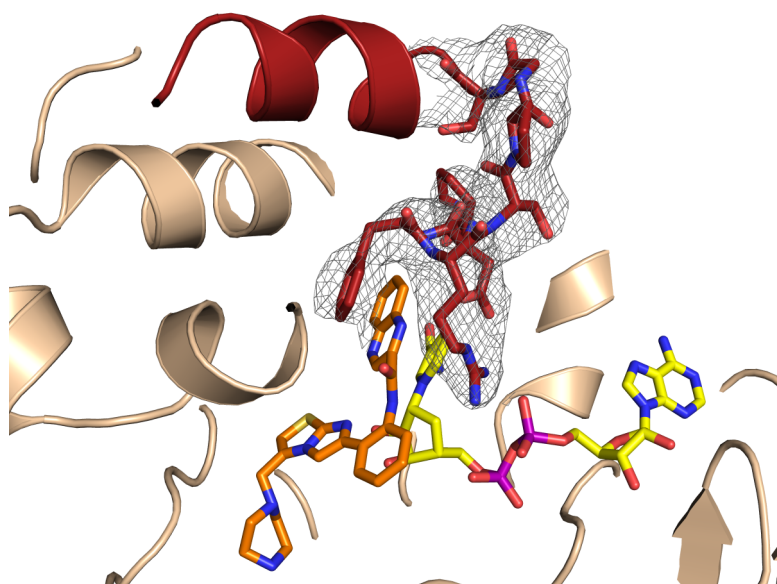
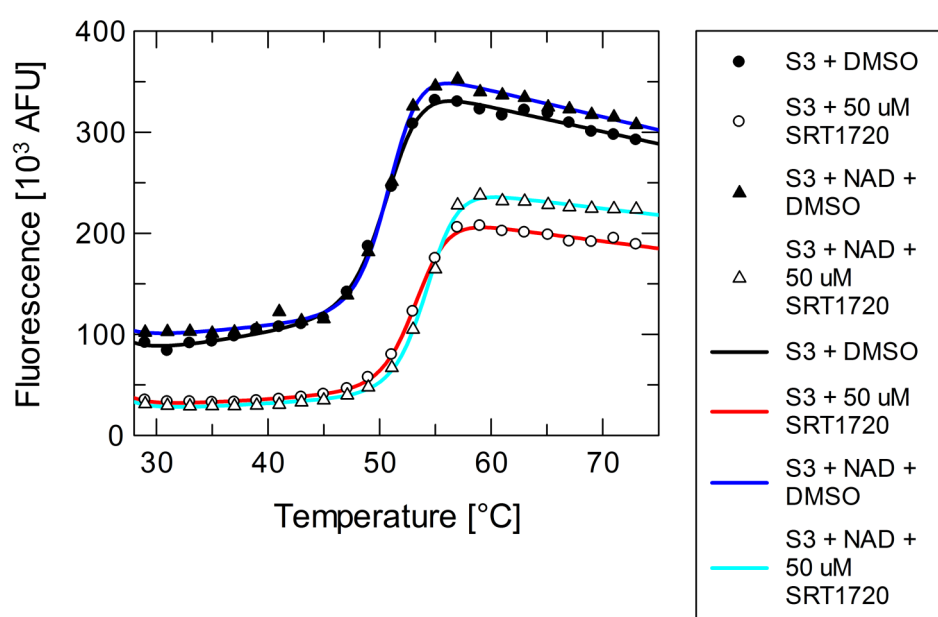


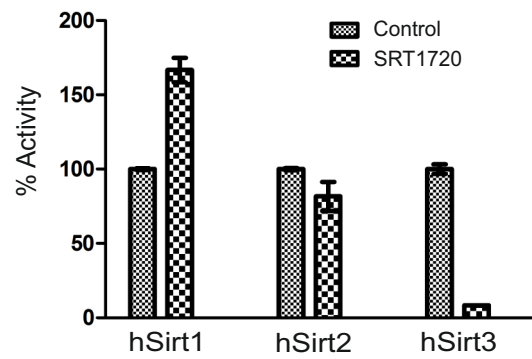
Supplementary material



Supplementary Figure S1: Cofactor binding loop region of the refined Sirt3/carbamoyl-S-adenosylmethionine (SAM) complex. 2Fo-Fc electron density contoured at 1σ is shown for residues 155-162 (2 Å distance cut-off).



Supplementary Figure S2: Thermal denaturation shift assays in presence and absence of 50 μM SRT1720 and/or 500 μM NAD $^{+}$. The lines shown are non-linear fits for a two state transition.



Supplementary Figure S3: Effects of 20 μ M SRT1720 on Fluor-de-Lys-1-deacetylation activity of different Sirtuin isoforms.