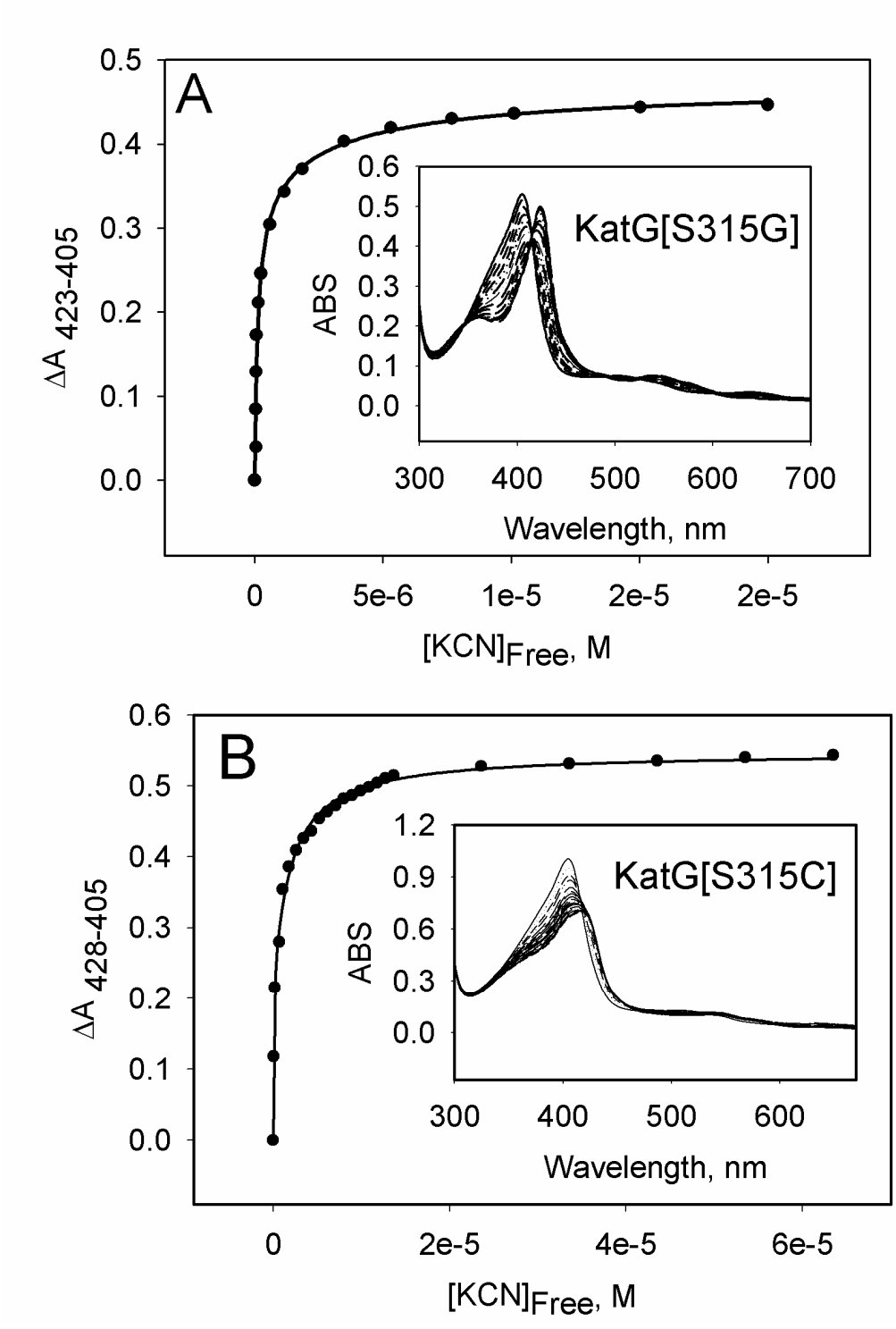
Supplemental data

Fig S1. Titration of KatG[S315G] (panel A) and KatG[S315C] (panel B) with potassium cyanide. The data points on the plots show Δ 423 nm (or Δ420 nm for the mutant) values as a function of the concentration of free cyanide. The data were fit to a two binding sites (non-interacting) model yielding K_{D1} and K_{D2} values equal to: 0.13 and 3.45 μM for KatG[S315G] and < 1 nM and 2.3 μM for KatG[S315C]. The insets show full spectra of the enzymes recorded 20 min after each addition of cyanide.

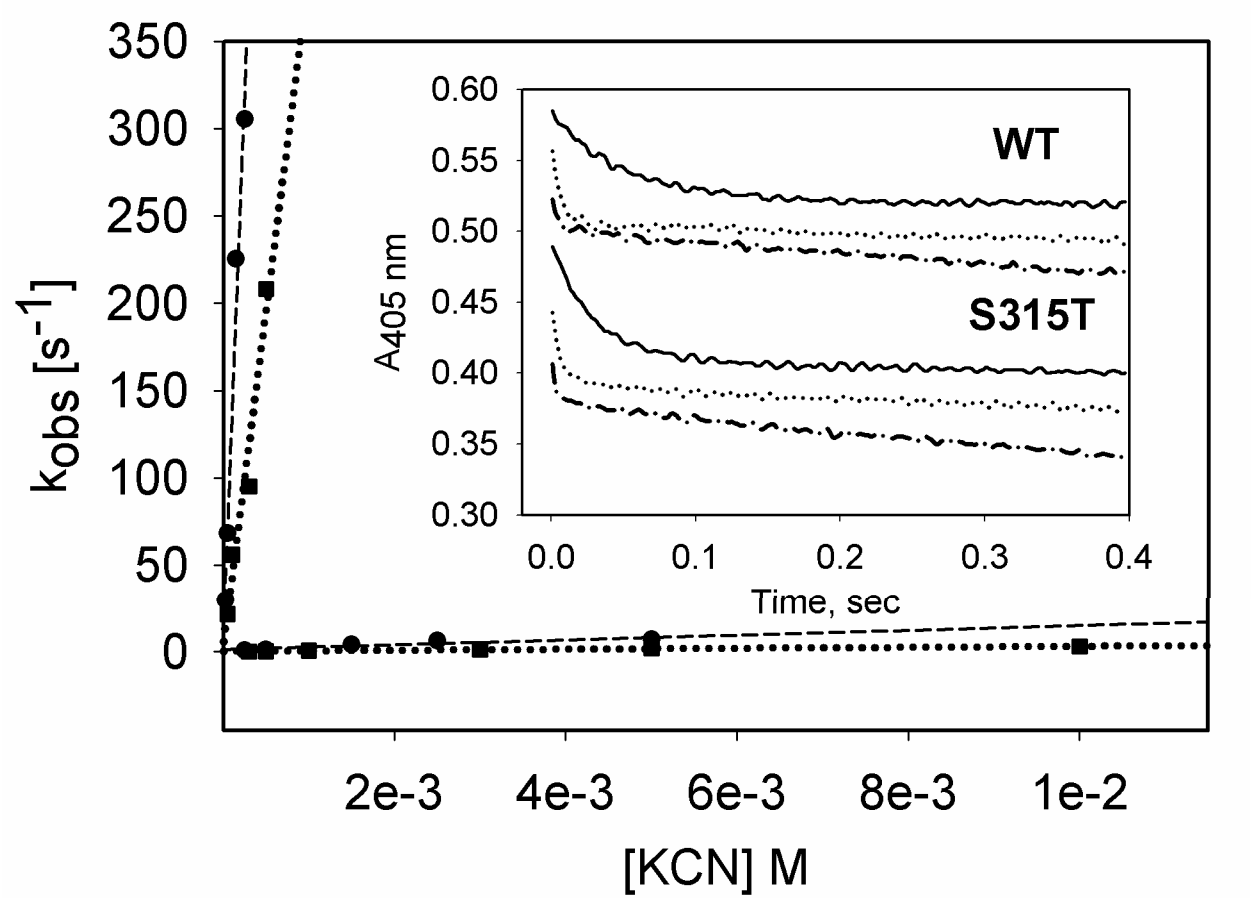
Fig. S2. Observed rates for cyanide binding to WT KatG and KatG[S315T] as a function of potassium cyanide concentration. The inset shows the time course of the absorbance change at 405 nm for the disappearance of resting enzyme. The plots give the second order rate constant (k_{on}) for cyanide binding and the y-intercepts give the dissociation rate (k_{off}) (see text)**.**

Fig. S3. Titration of fresh WT KatG and KatG[S315T] with minimal fractional equivalents of potassium cyanide. The ΔA423nm or ΔA420nm is plotted against free KCN concentration

Supplemental Data 1 (S1).



Supplemental data 2 (S2).



Supplemental data 3 (S3).