

## Legends to supplemental figures

Fig. S1: Additional photographs of individuals with CxxC variants. (A) Photographs of individual #4 showing her hands at 3y5m. (B) Photographs of individual #10 showing his hands, legs and teeth at 12y8m. (C) Photograph of individual #5, showing a high forehead, a triangular face, short flared eyebrows, deep-set eyes, high nasal bridge, small nasal ridge and pointed upper lip.

Fig. S2: Expression of KDM2B short form (SF) and long form (LF). (A+B) Western blot results of WT and mutant His-KDM2B-SF expression in HEK293T cells following transfection with WT or mutant His-KDM2B-SF expression plasmid. Tubulin is used as a loading control, GFP as transfection control. (C+D) Western blot results of WT and mutant His-KDM2B-LF expression in HEK293T cells following transfection with WT or mutant His-KDM2B-LF expression plasmid. Tubulin is used as a loading control, GFP as transfection control.

Fig. S3: Protein purification of His-tagged CxxC protein. (A) Western blot of purified WT and mutant His-tagged CxxC protein. (B) InstantBlue gel staining and Western blot analysis (anti-His) of purification of WT and mutant His-tagged CxxC protein.

Fig. S4: Binding curves of mutant CxxC protein together with WT CxxC protein. Individual graphs of binding curves of mutant CxxC protein with WT CxxC protein. Binding curves are obtained through fitting non-linear regression hyperbola.

**Supplementary Figure S1: Additional photographs of individuals with CxxC variants**

**A** #4 p.(Cys616Trp) 3y5m



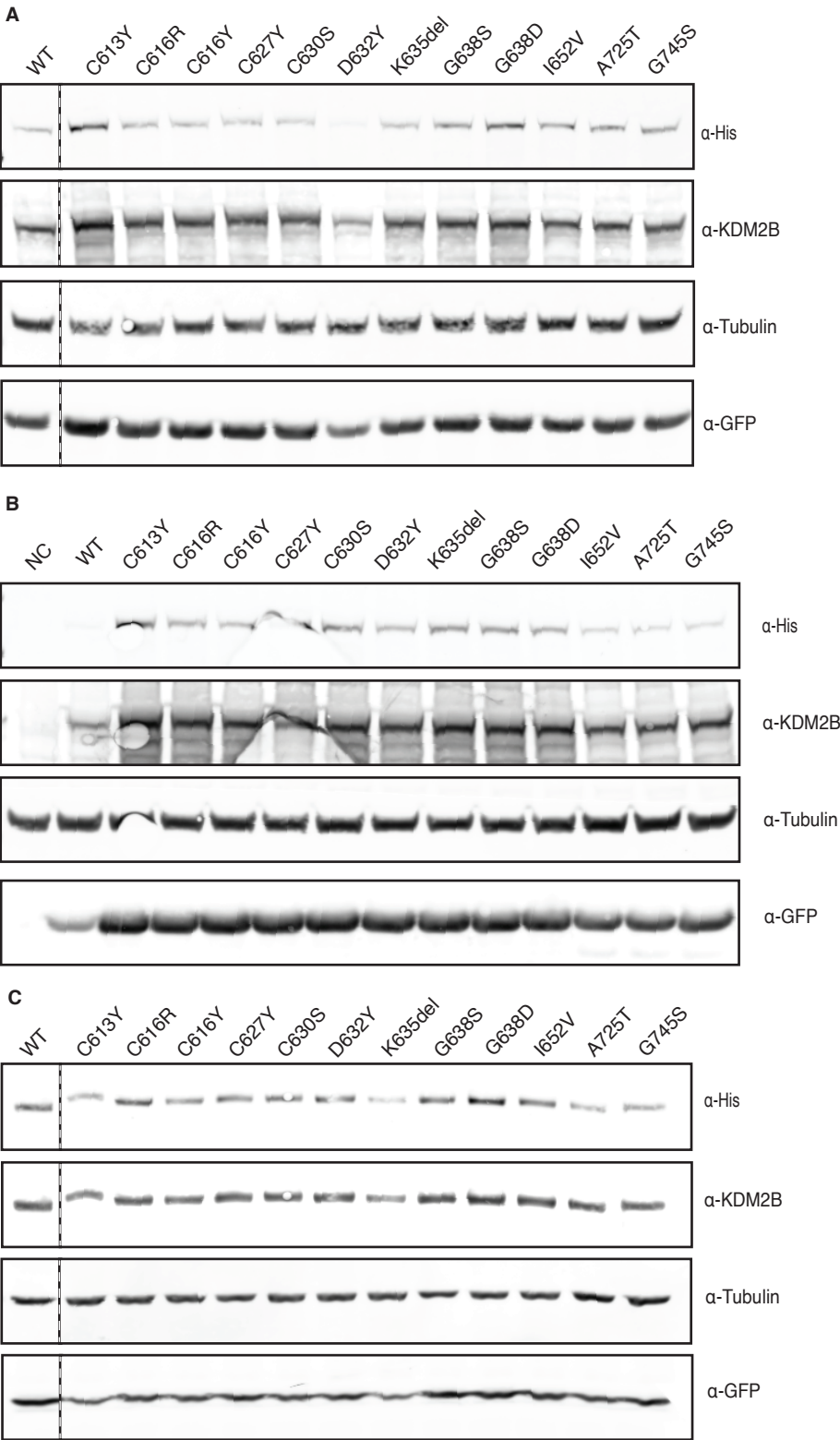
**B** #10 p.(Arg649Pro) 12y8m



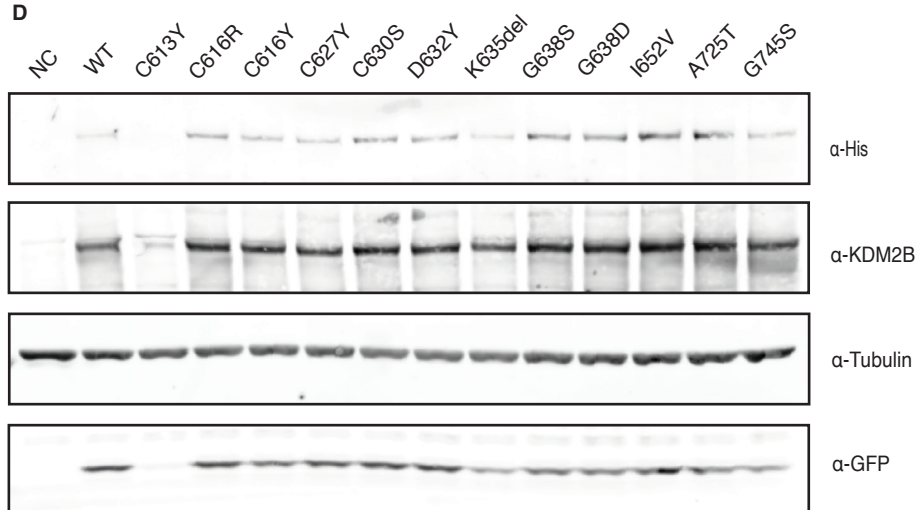
**C** #5 p.(His628Leu)



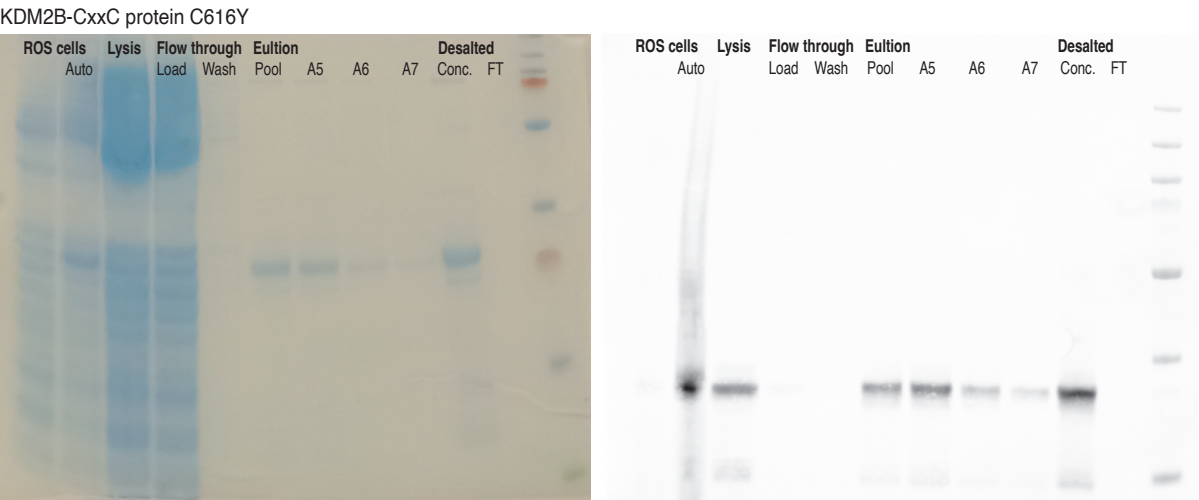
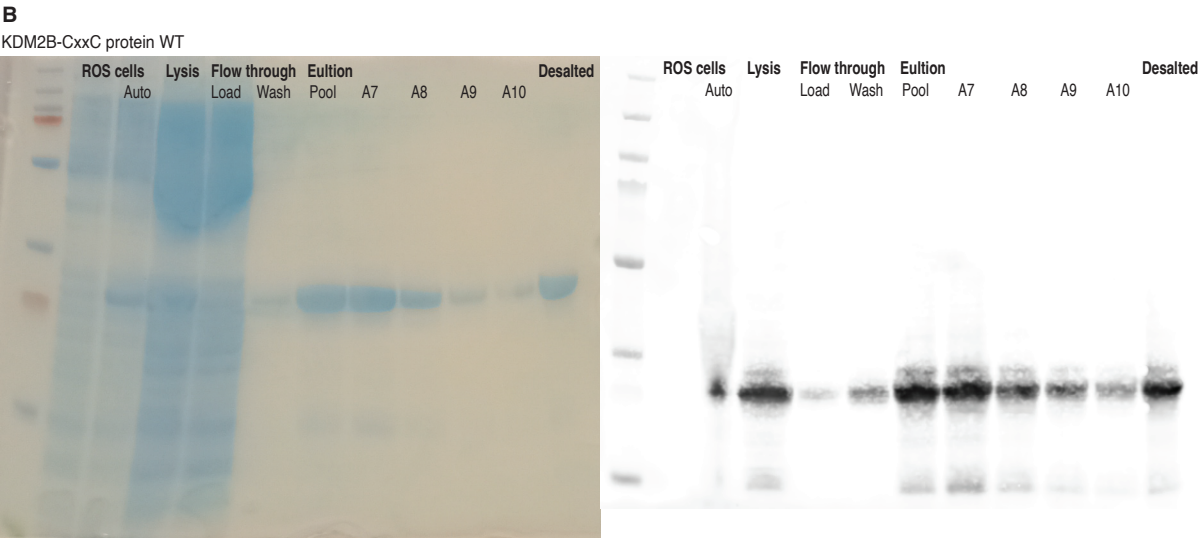
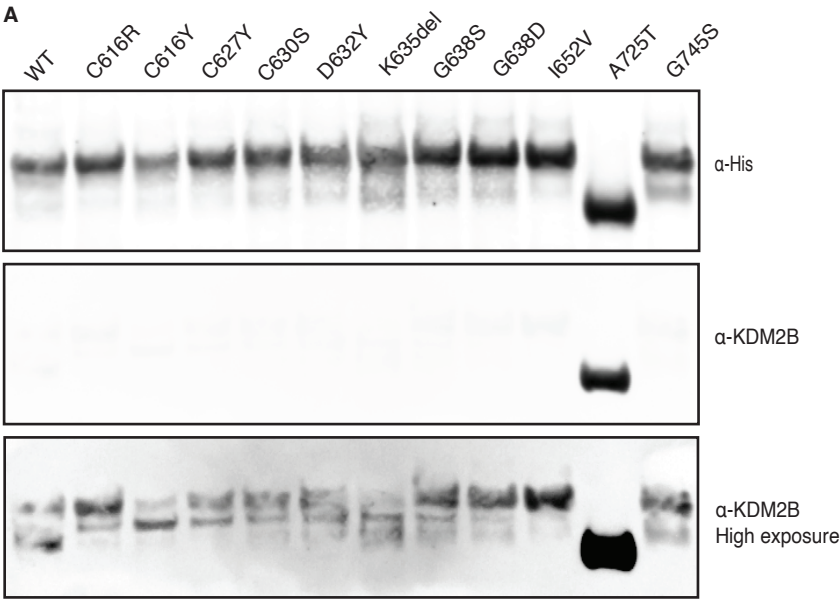
Supplementary Figure S2: Expression of KDM2B short form (SF) and long form (LF)



**D**

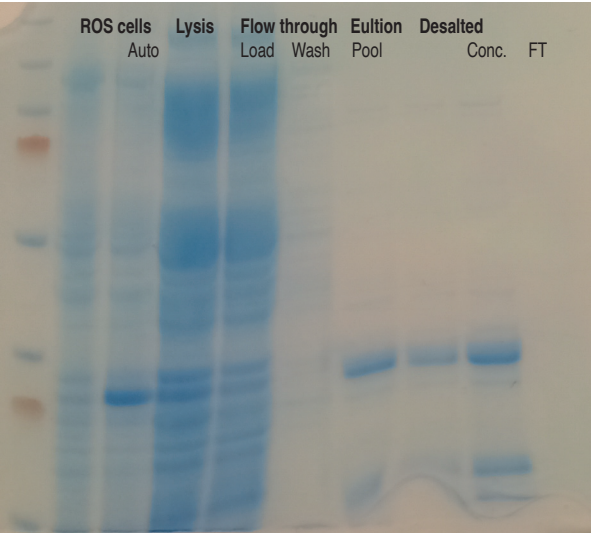


Supplementary Figure S3: Protein purification of His-tagged CxxC protein

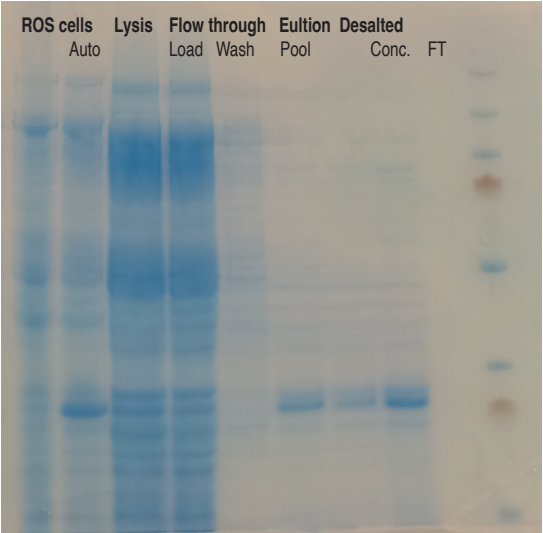




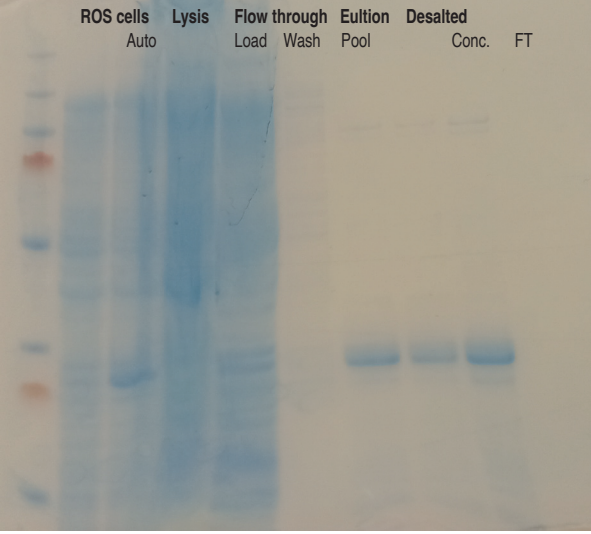
KDM2B-CxxC protein C616R



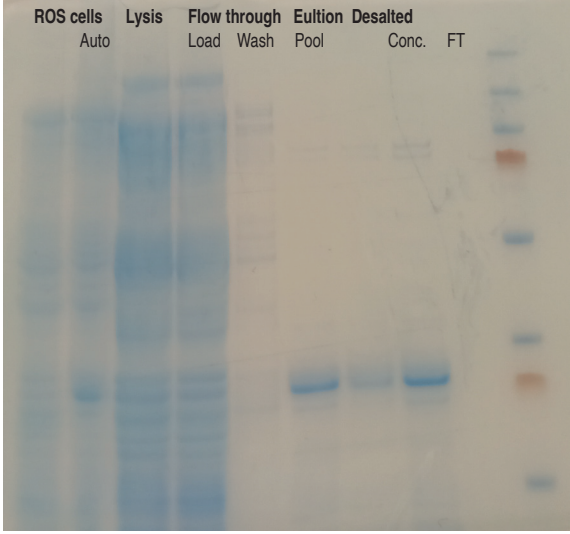
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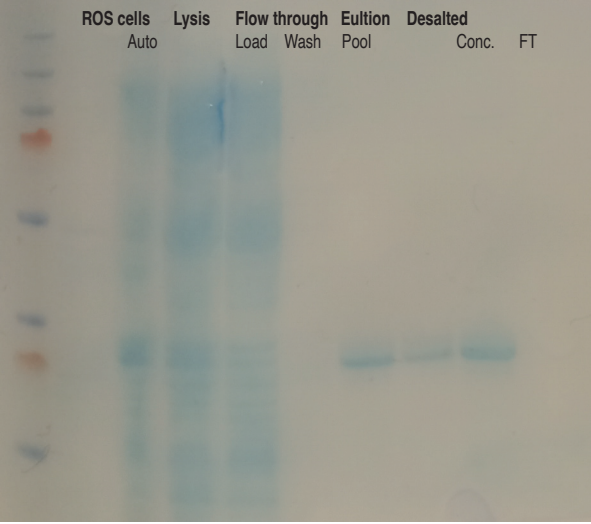
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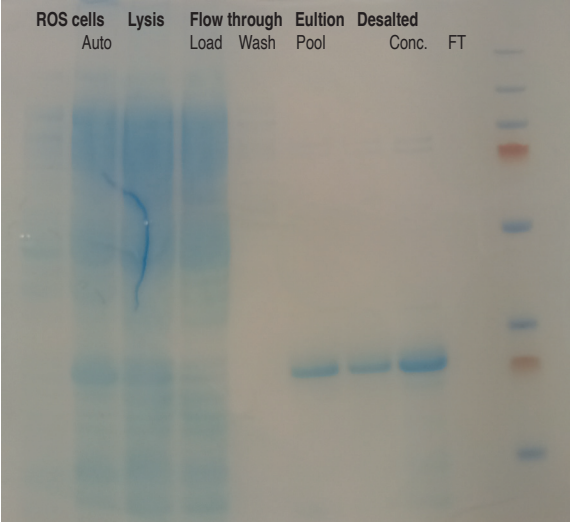
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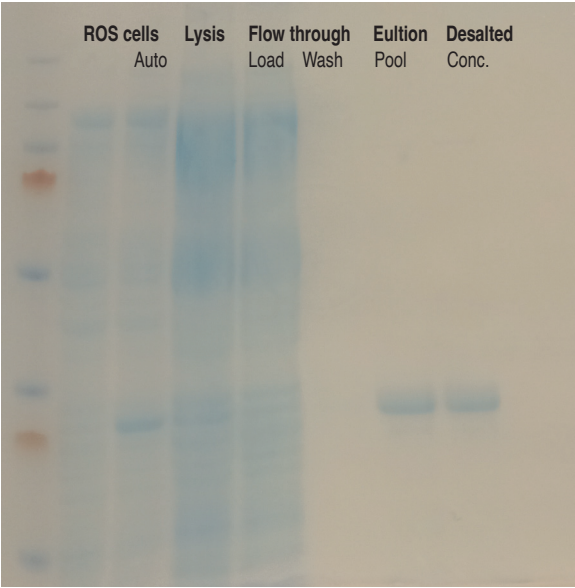
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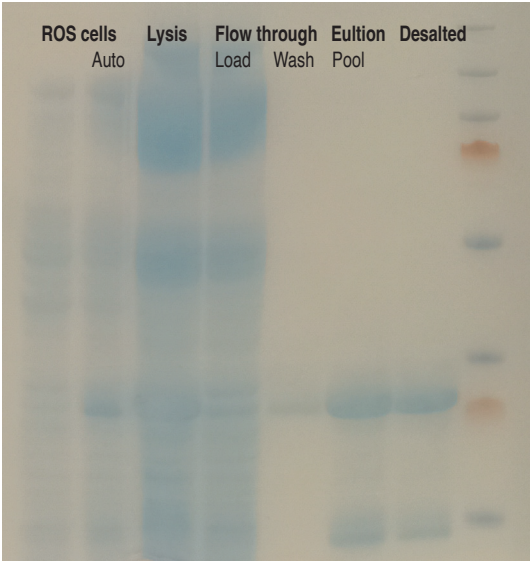
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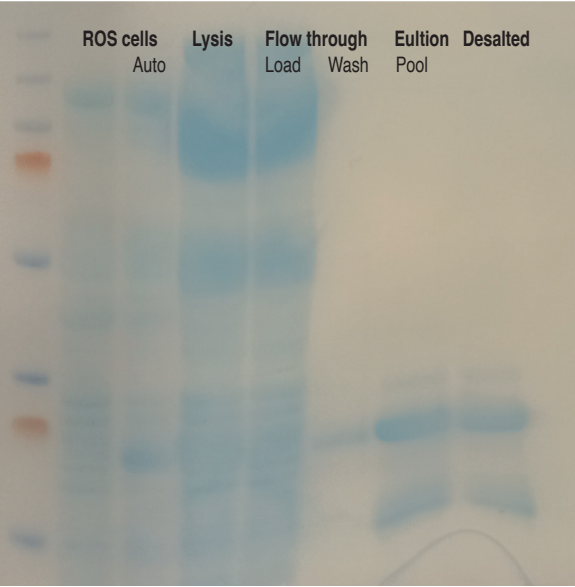
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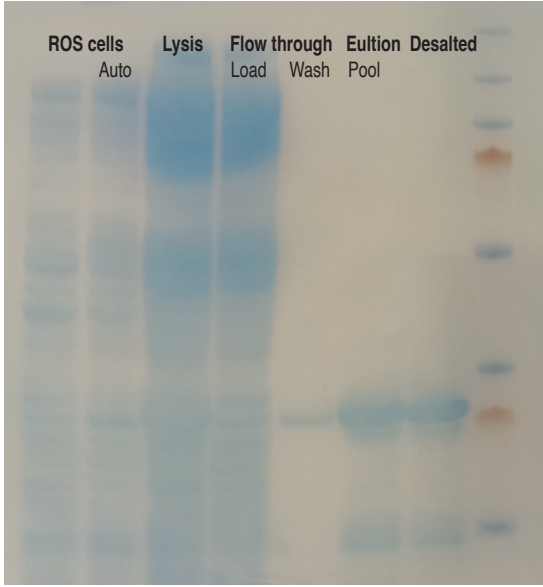
KDM2B-CxxC protein I652V



KDM2B-CxxC protein A725T



KDM2B-CxxC protein G745S



Supplementary Figure S4: Binding curves of mutant CxxC protein together with wildtype CxxC protein

