SI APPENDIX

Figure S1



Figure S1 Screen to identify DUBs that bind with $\text{HIF2}\alpha$

A-D, Immunoblots of whole cell extracts (Input) and immunoprecipitations (IP) from 293T cells transfected with Flag tagged DUB proteins and treated with 10μ M MG132 as indicated.



Figure S2 Effects of knockdown of USP39 or USP29 on HIF2 $\!\alpha$

A-B, Immunoblots of lysates from UMRC2 cells transfected with either Ctrl siRNA or siRNA targeting USP39 or USP29.



Figure S3 Loss of USP37 suppresses ccRCC cell growth

A-C, Proliferation of indicated cells infected with lentivirus containing either Ctrl shRNA or shRNA targeting USP37.

D-F, Proliferation of indicated cells infected with lentivirus containing either Ctrl sgRNA or sgRNA targeting USP37.



Figure S4 Loss of USP37 inhibits UMRC2 cell proliferation and 3-D soft agar growth

A, Proliferation of UMRC2 cells infected with lentivirus containing either Ctrl sgRNA or sgRNA targeting USP37.

B-C, Representative crystal violet staining and 3-D soft-agar growth pictures of UMRC2 cells infected with either Ctrl sgRNA or sgRNA targeting USP37.



Figure S5 Validating sgHIF2 α efficiency in 786-O cells

Immunoblots of lysates from 786-O cells infected with either Ctrl sgRNA or sgRNA targeting HIF2a.