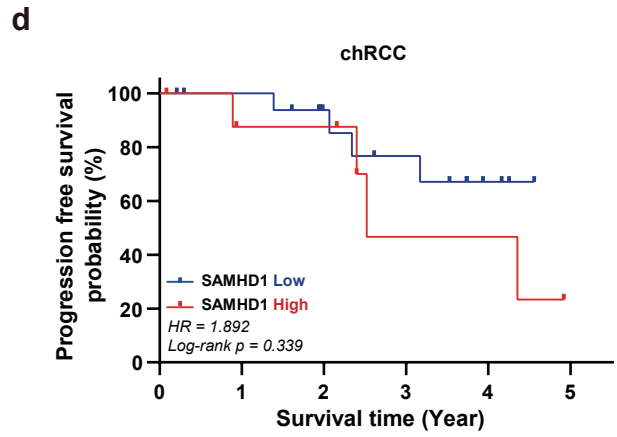
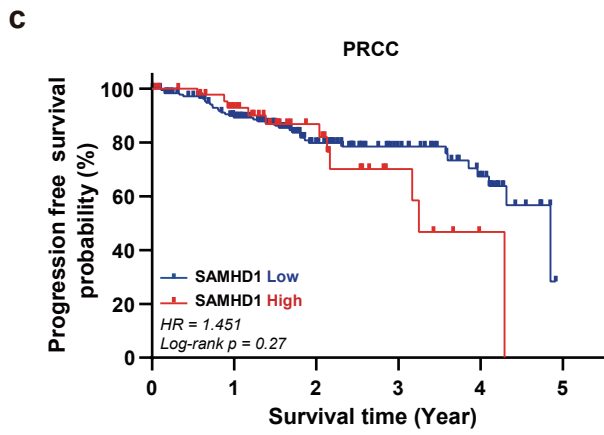
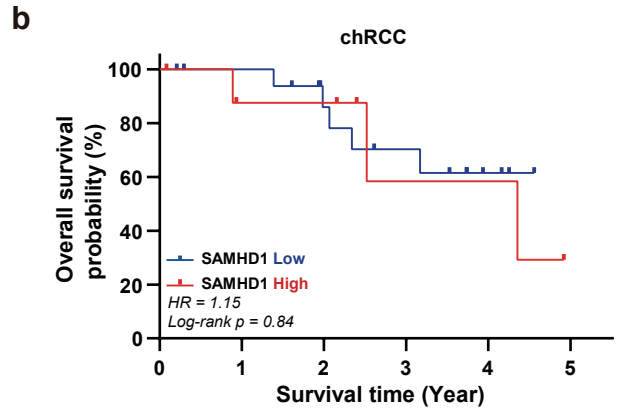
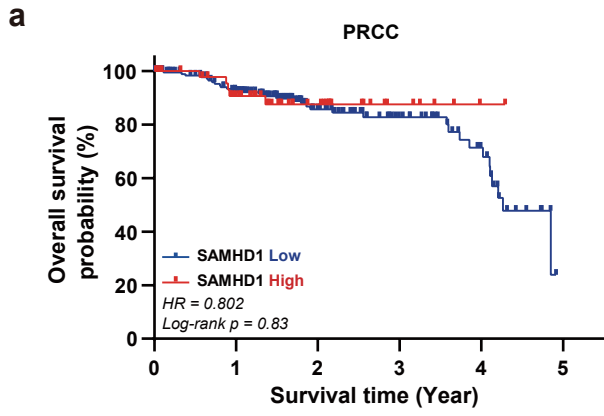
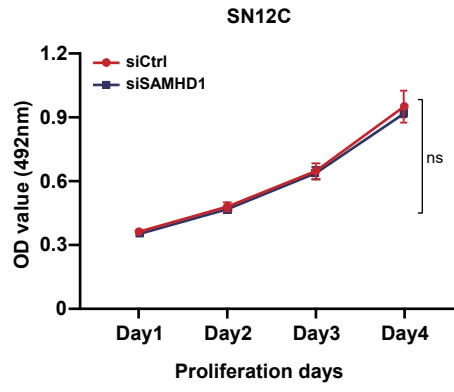
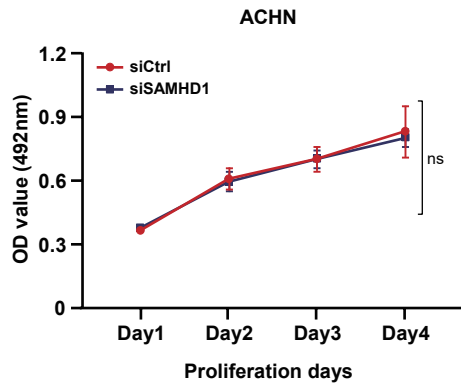


Supplementary 1. *An et al.*

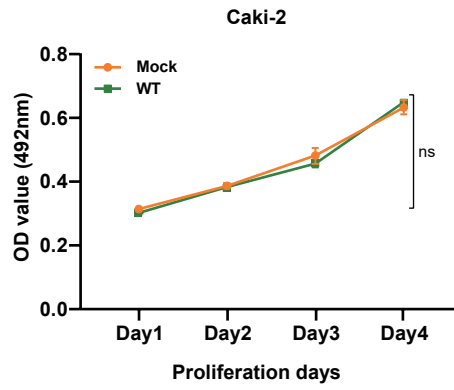
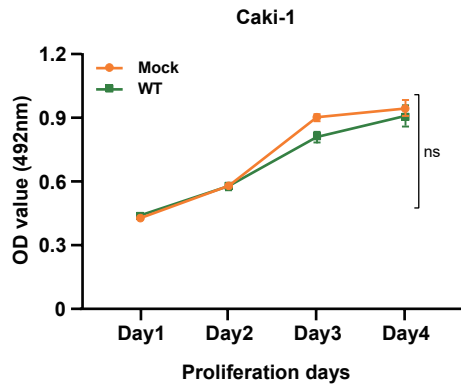


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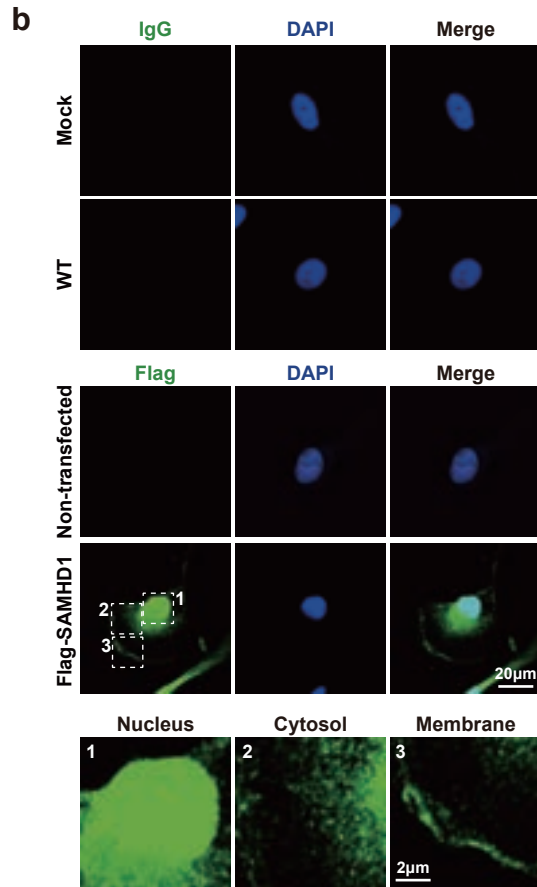
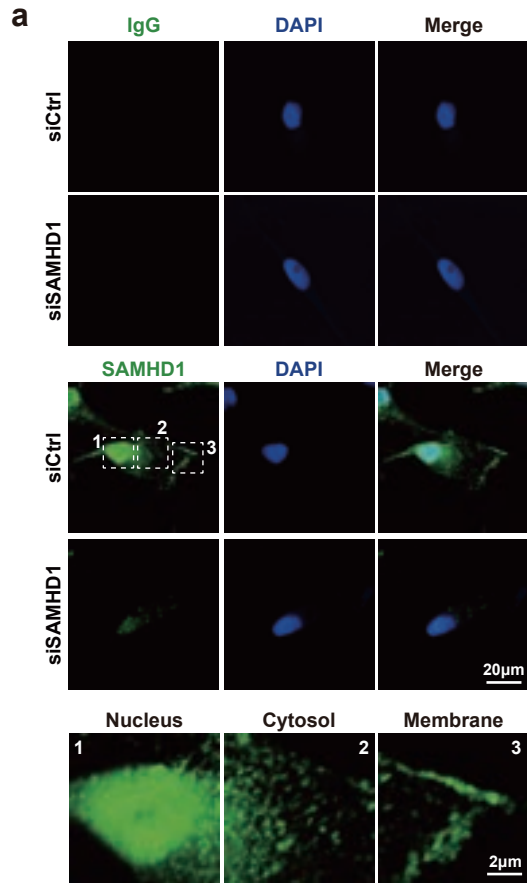
a



b



Supplementary 3. *An et al.*



1 **Supplementary Information**

2

3 **Supplementary Fig. S1. SAMHD1 does not affect patient survival rates in the renal**
4 **papillary cell carcinoma (PRCC) and kidney chromophobe (chRCC) subtypes.**

5 **(a)** Kaplan–Meier analysis of 5-year overall survival (OS) between PRCC patient groups with
6 high (n = 50) and low SAMHD1 expression (n = 187). Log-rank $p = 0.83$. **(b)** Kaplan–Meier
7 analysis of 5-year OS between chRCC patient groups with high (n = 9) and low SAMHD1
8 expression (n = 18). Log-rank $p = 0.84$. **(c)** Kaplan–Meier analysis of 5-year progression-free
9 survival (PFS) between PRCC patient groups with high (n = 49) and low SAMHD1 expression
10 (n = 186). Log-rank $p = 0.27$. **(d)** Kaplan–Meier analysis of 5-year PFS between chRCC patient
11 groups with high (n = 9) and low SAMHD1 expression (n = 18). Log-rank $p = 0.339$.

12

13 **Supplementary Fig. S2. SAMHD1 does not affect cell proliferation**

14 **(a, b)** Cell proliferation assay was performed using MTS reagent in SAMHD1-knockdown
15 ACHN (left) and SN12C cells (right) **(a)** or SAMHD1-overexpressed Caki-1 (left) and Caki-2
16 cells (right) **(b)**. Data are presented as the mean \pm SD of three independent experiments.

17

18 **Supplementary Fig. S3. SAMHD1 mainly localizes in the nucleus and partially in the**
19 **cytoplasm and cell membrane.**

20 **(a)** IF with anti-IgG (negative control), anti-SAMHD1 antibodies, and 4',6-diamidino-2-
21 phenylindole (DAPI) staining of SAMHD1-knockdown Caki-1 cells. **(b)** IF staining with anti-

22 Flag antibody and DAPI of SAMHD1-overexpressed Caki-1 cells. Anti-IgG antibody was used
23 as a negative control.