

## **Characterization of the expression of the heavy chain of 4F2 antigen as a therapeutic target in prostate cancer**

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**Table S1.** Primer sequences for real-time PCR

Gene	Primer Type	Sequence (5' to 3')
<i>4F2hc</i>	Forward	ACCCCTGTTTTTCAGCTACGG
	Reverse	GGTCTTCACTCTGGCCCTTC
<i>LAT1</i>	Forward	AGGAGCCTTCCTTTCTCCTG
	Reverse	CTGCAAACCCTAAGGCAGAG
<i>SKP2</i>	Forward	GATGTGACTGGTCGGTTGCTGT
	Reverse	GAGTTCGATAGGTCCATGTGCTG
<i>MYBL2</i>	Forward	AAAACAGTGAGGAGGAAC
	Reverse	CAGGGAGGTCAAATTTAC
<i>FOX M1</i>	Forward	GCATGAGGATGATTCTGACCT
	Reverse	GATCTGTGGACCACAAGATC
<i>H2AFX</i>	Forward	GGGCCTAGCTATCCCTCTCCCT
	Reverse	CTGCAAAAGTTCCAGTTCAGAAGCCAGA
<i>ARHGAP19</i>	Forward	AGATCTATGGCGACTGAGGCACAGAG
	Reverse	GAATTCTGCATGGACCATAGGAGACA

**Table S2.** Comparison of clinical factors between LAT1 Low and LAT1 High groups

	LAT1 Low	LAT1 High	P
Age (y)	66.00 ± 5.39	65.50 ± 5.32	0.5578
cT stage (n)			0.3108
1	17	36	
2	2	11	
3	3	8	
GS (n)			0.0399      *
6	11	13	
7	7	29	
8	4	8	
9	3	9	
TST (ng/dL)	5.49 ± 2.16	4.61 ± 1.72	0.0928
PSA (ng/mL)	10.07 ± 6.79	7.53 ± 6.40	0.7046
PSAD	0.27 ± 0.26	0.30 ± 0.29	0.4738

Data are expressed as means ± standard deviation unless otherwise indicated. cT stage = clinical tumour stage, GS = Gleason score, TST = testosterone, PSA = prostate-specific antigen, PSAD = PSA density

Figure S1. Associations among 4F2hc, SKP, and LAT1 expressions. The expression of 4F2hc in C4-2 cells is inhibited by si4F2hc (A). Knocked down expression of 4F2hc inhibits expression of SKP2 and LAT1 (B and C). The expression of SKP2 in C4-2 cells is inhibited by siSKP2 (D). Knocked down expression of SKP2 in C4-2 cells using siSKP2 does not affect the expression of 4F2hc and LAT1 in mRNA levels (E and F). Nega indicates negative siRNA control. Data represent three independent experiments with similar results. P-values were calculated by the Mann–Whitney U-test. N.S., no significant difference. \*P<0.05, \*\*P<0.01.

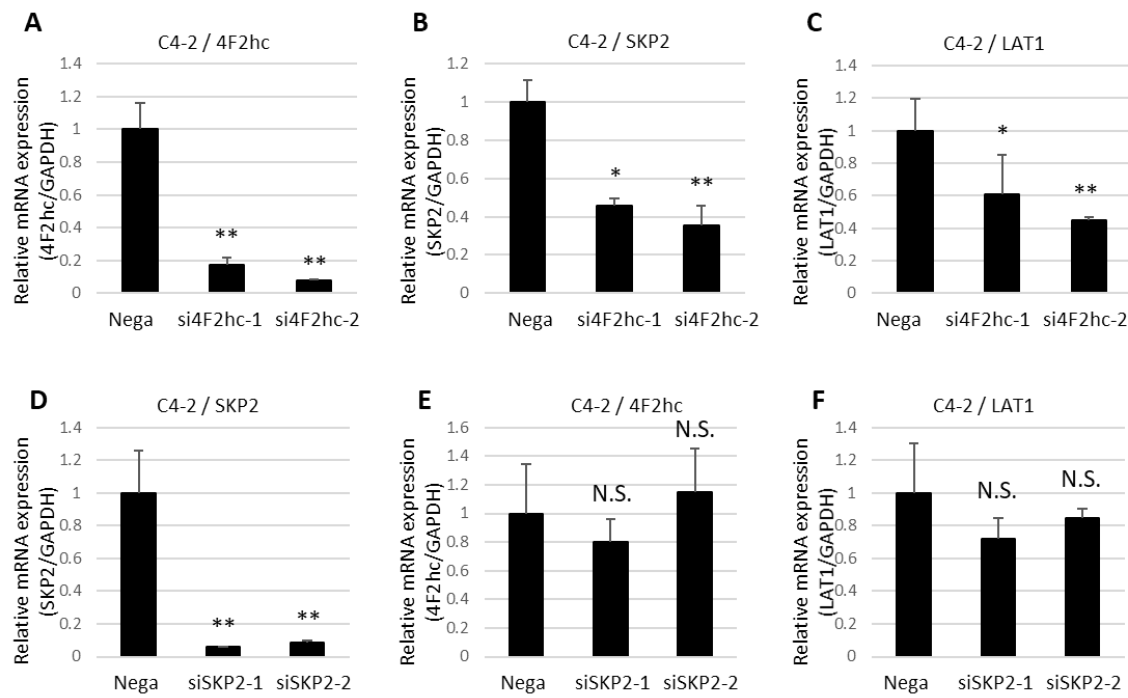


Figure S2. Representative histological sections from prostate cancer tissue. LAT1 expression in PC tissues was analysed by immunohistochemistry. Sections were stained with haematoxylin and eosin (A, a: 600  $\mu$ m and b: 200  $\mu$ m). Representative images of LAT1 immunohistochemical expression (c: 600  $\mu$ m and d: 200  $\mu$ m).

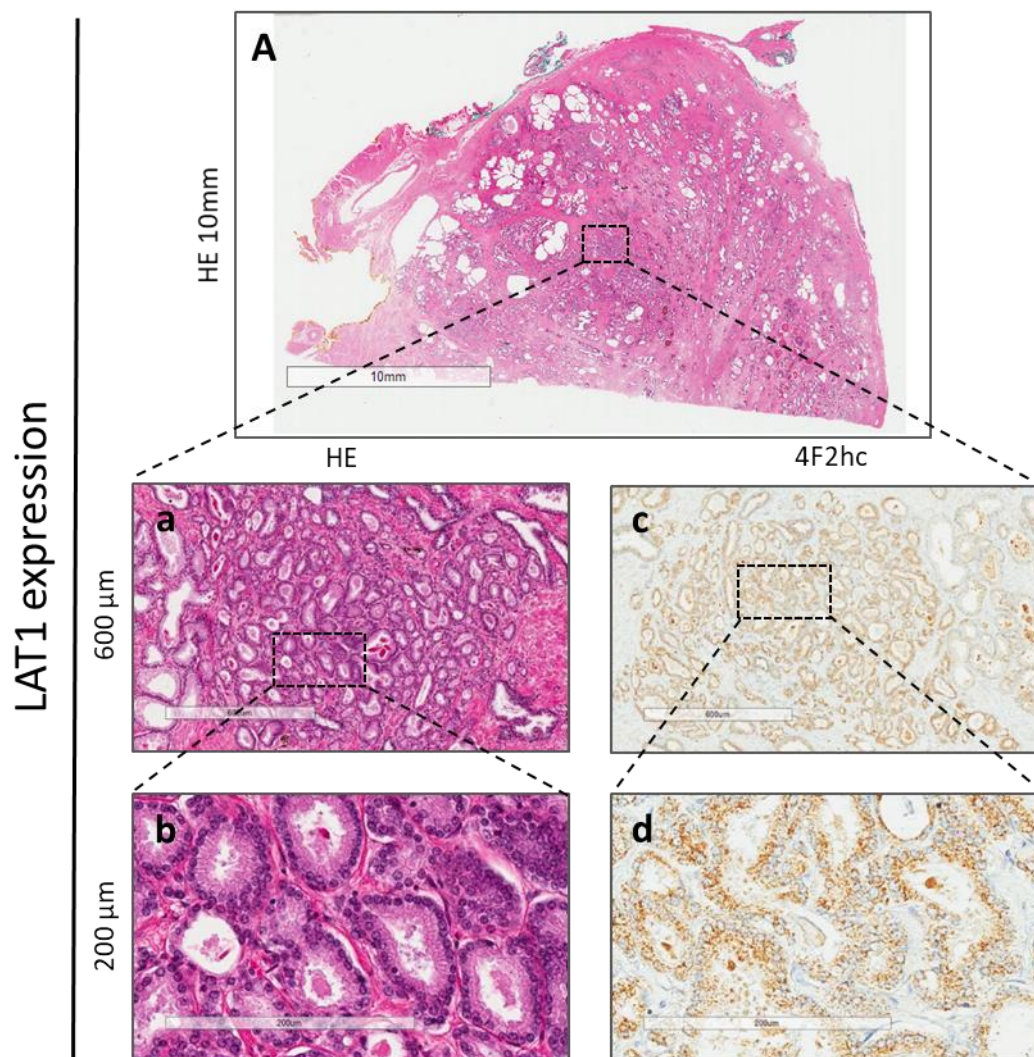
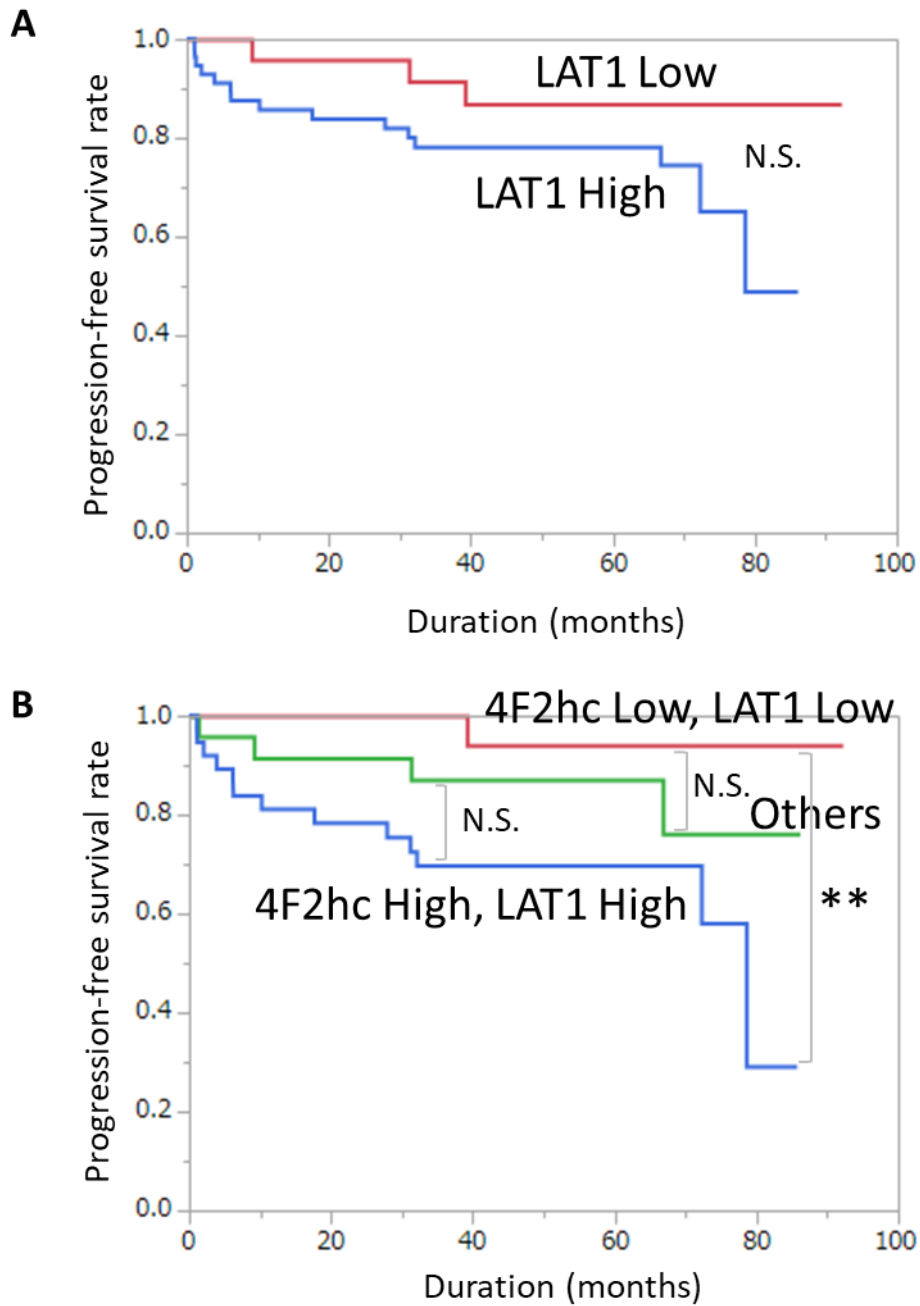


Figure S3. Progression-free survival of PC patients categorized by 4F2hc and LAT1 expression. Prognostic significance of LAT1 expression for PFS (A). Prognostic significance of high 4F2hc/high LAT1 expression and low 4F2hc/lowLAT1 expression. Others are low 4F2hc/high LAT1 or high 4F2hc/low LAT1 (C). N.S. No significant difference. \*\* $p < 0.01$ .



Uncropped Data

Figure1A

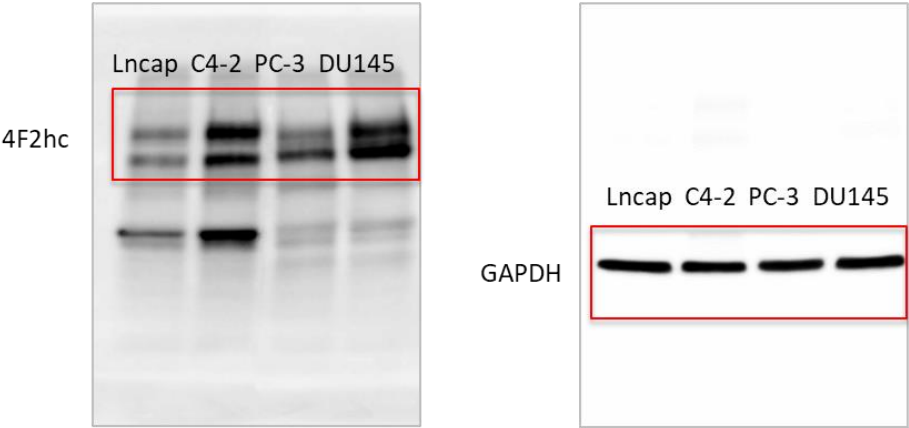


Figure1D

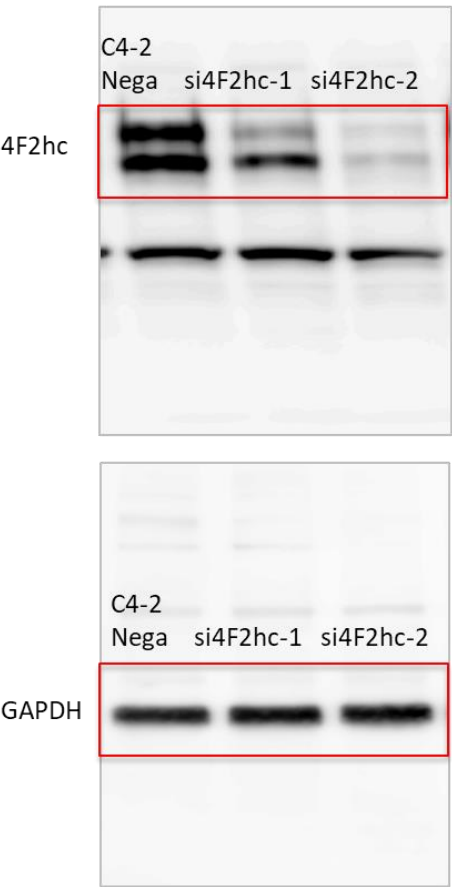


Figure1E

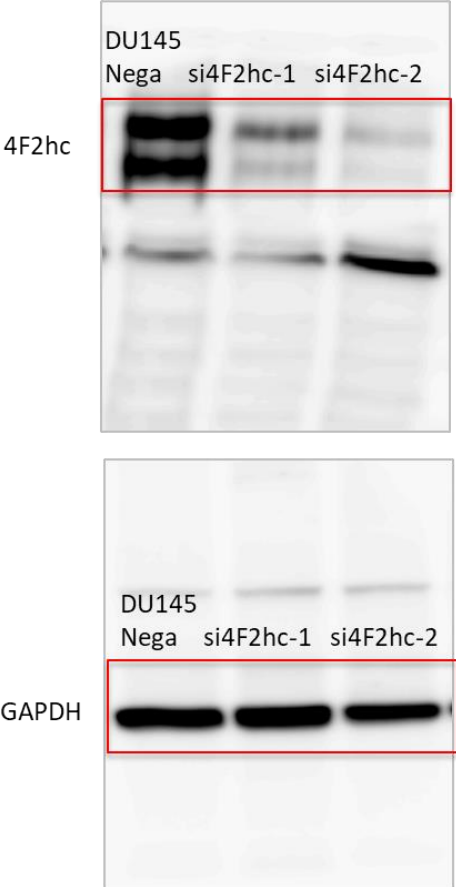


Figure4E

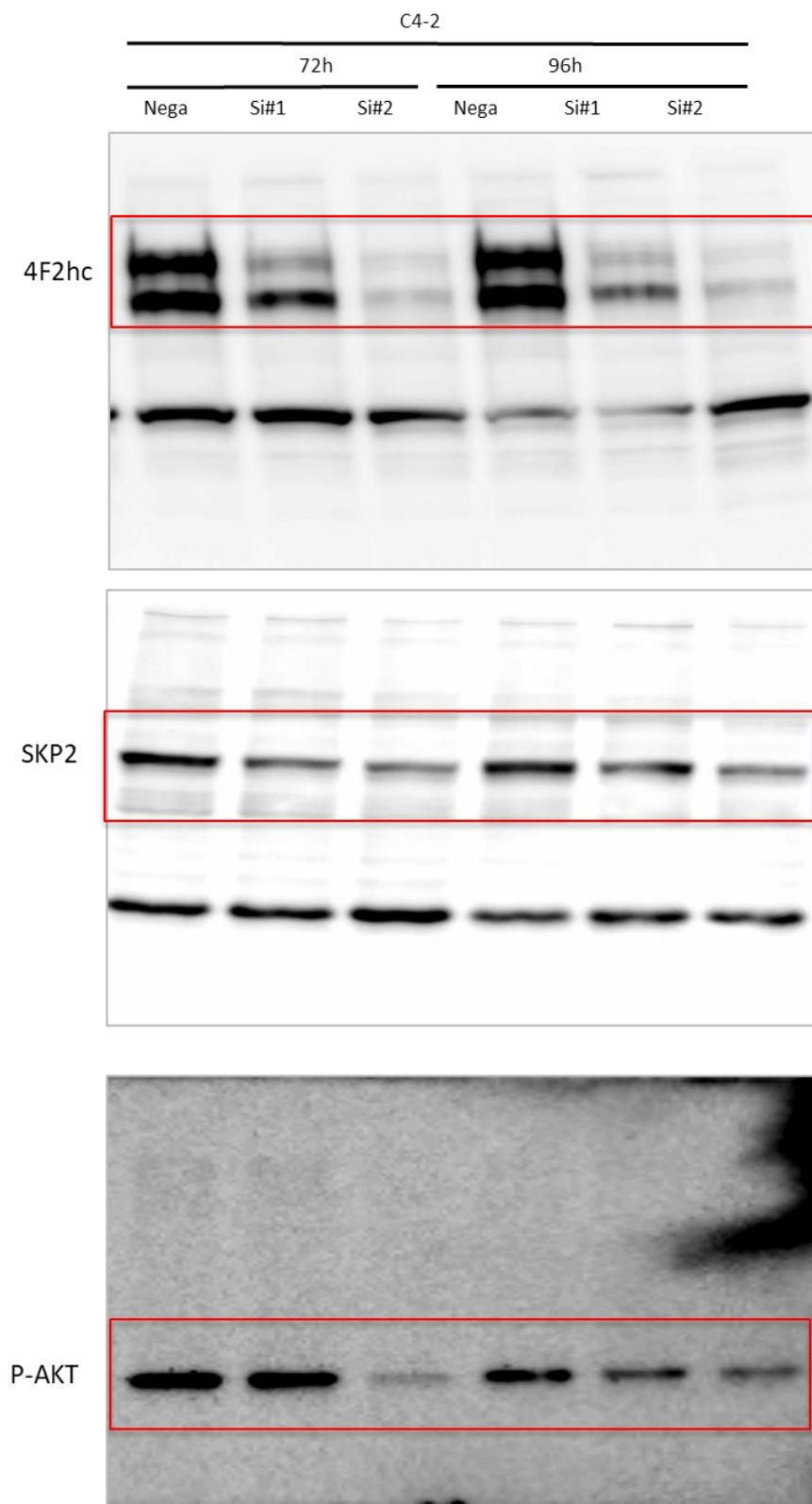




Figure4E

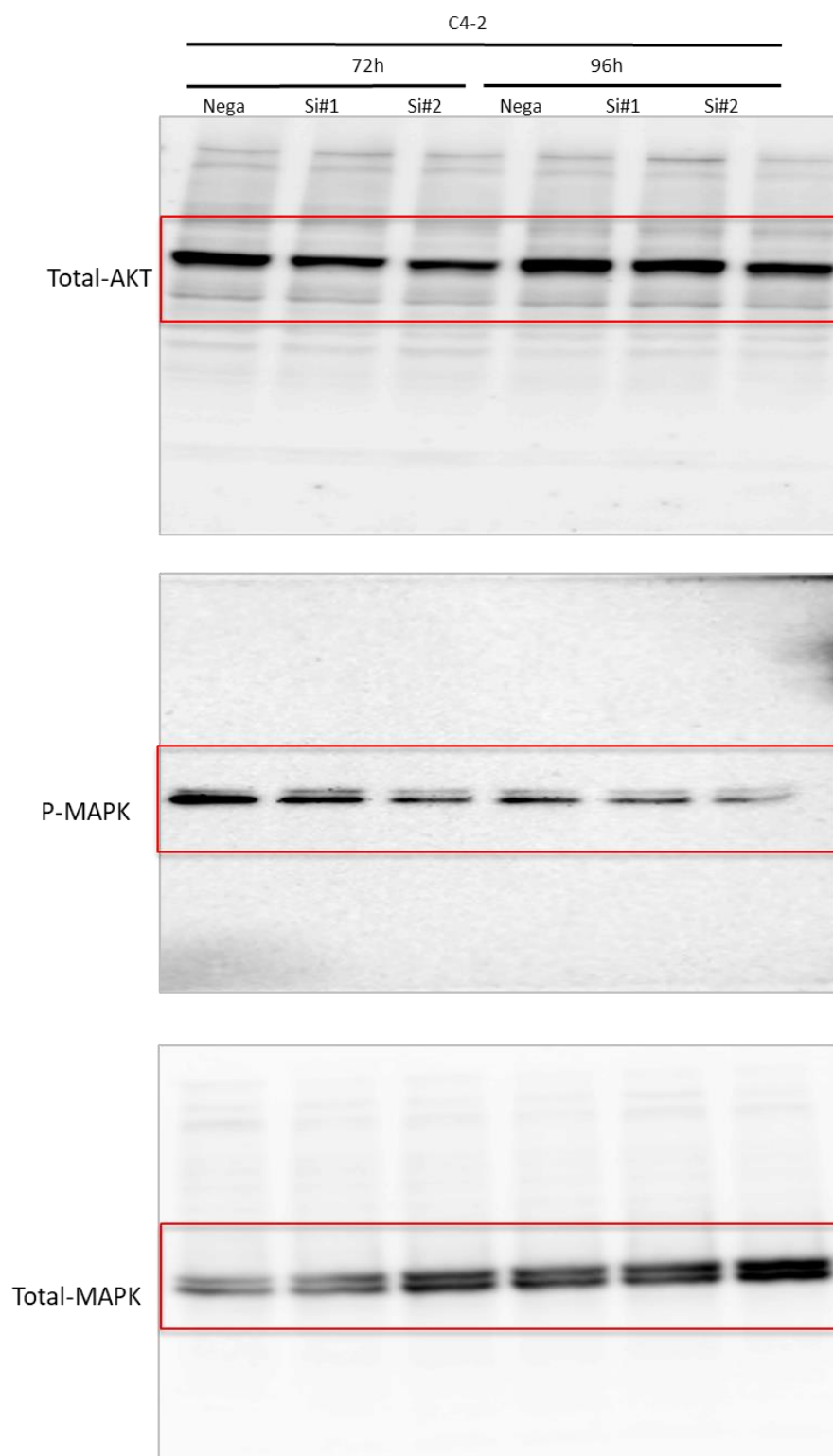


Figure4E

