

HeLa

## Supplementary Figure 1: Loss of Zyxin stabilizes Lats2 and activates Hippo Signalling.

(a, b) MDA-MB-231 cells were treated with 5 ng ml-1 TGF- $\beta$ , collected at indicated the time points and then immunoblotted with the indicated antibodies (a) and quantification of Lats2 (normalized to actin) and p-Yap (normalized to Yap) protein levels (b). Ratio t-test was applied. (c, d) HeLa cells stably expressed shRNA against Zyxin were collected for immunoblotting with indicated antibodies (c) and quantification of Lats2 (normalized to actin) and p-Yap (normalized to actin) and p-Yap (normalized to Yap) protein levels (d). Ratio t-test was applied. (e) Zyxin-V5 overexpressed HeLa cells were stained with DAPI and antibodies against Yap and V5. Scale bars: 10 µm. All error bars indicate s.d.. \*, *P* < 0.05.



## Supplementary Figure 2: Zyxin potentiates Lats2 degradation in a dosage dependent manner.

(a) Lats2 degradation was dosage-dependent on Zyxin and this effect was blocked by the dominant negative mutant of Siah2. (b) Lats1/2 stability was regulated by Zyxin.

Supplementary Figure 3: Zyxin facilitates Siah2-Lats2 binding is independent of F-actin cytoskeleton.



collected and subjected to immunoblotting with the indicated antibodies (e) and quantification of Lats2 (normalized to actin) and p-Yap (normalized to Yap) protein levels (f). Ratio t-test was applied. (g) MDA-MB-231 cells in (e) were stained with DAPI, Phalloidin and antibody against Yap. Scale bars: 25  $\mu$ m. All error bars indicate s.d.. \*, *P* < 0.05; \*\*, *P* < 0.01.

Supplementary Figure 4: Specificity evaluation of anti-Zyxin antibody by IHC analysis.



Zyxin RNAi

## Supplementary Figure 4: Specificity evaluation of anti-Zyxin antibody by IHC analysis.

Zyxin knockdown xenograft tumor tissues were used to verify the specificity of Zyxin antibody for IHC. Scale bars: 50 µm.

Supplementary Figure 5: Uncropped images of key blots/gels.



Figure 2a





Figure 3e







Figure 4f





Figure 5b



Figure 5d





Supplementary Figure 1a



## Supplementary Figure 1c

Myc (ip)	Myc (ip)	Myc (ip)	Lats2	Actin	Repeat1
			Lats2		Repeat2
Flag (ip)	Flag (ip)	Flag (ip)		Actin	
Repeat1	Repeat2	Repeat3			
Supplementary Figure 3a			when the 2 w		peat
Lats2	Lats2	Lats2	+2 Cybert - 3.		Re
			Lats2		
	and the part of the second	· ···· · ··· · ···	Supplementary Figur	re 3b	
p-Yap	p-Yap	p-Yap			



Supplementary Figure 3c