

CORRECTION

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Correction: Hippo component YAP promotes focal adhesion and tumour aggressiveness via transcriptionally activating THBS1/FAK signaling in breast cancer

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Following the publication of the original article [1], errors were found in Figs. 2i and 6i. Incorrect adhesion assay photo of “siYAP-2#” group into “siYAP-3#” group in Fig. 2i and the Transwell photo of “siTHBS1-1#” group into the “siTHBS1-2#” group in Fig. 6i were presented.

The authors declare that the correction does not change the results or conclusions of this paper. The correct figures are given below:

The online version of the original article can be found at <https://doi.org/10.1186/s13046-018-0850-z>.

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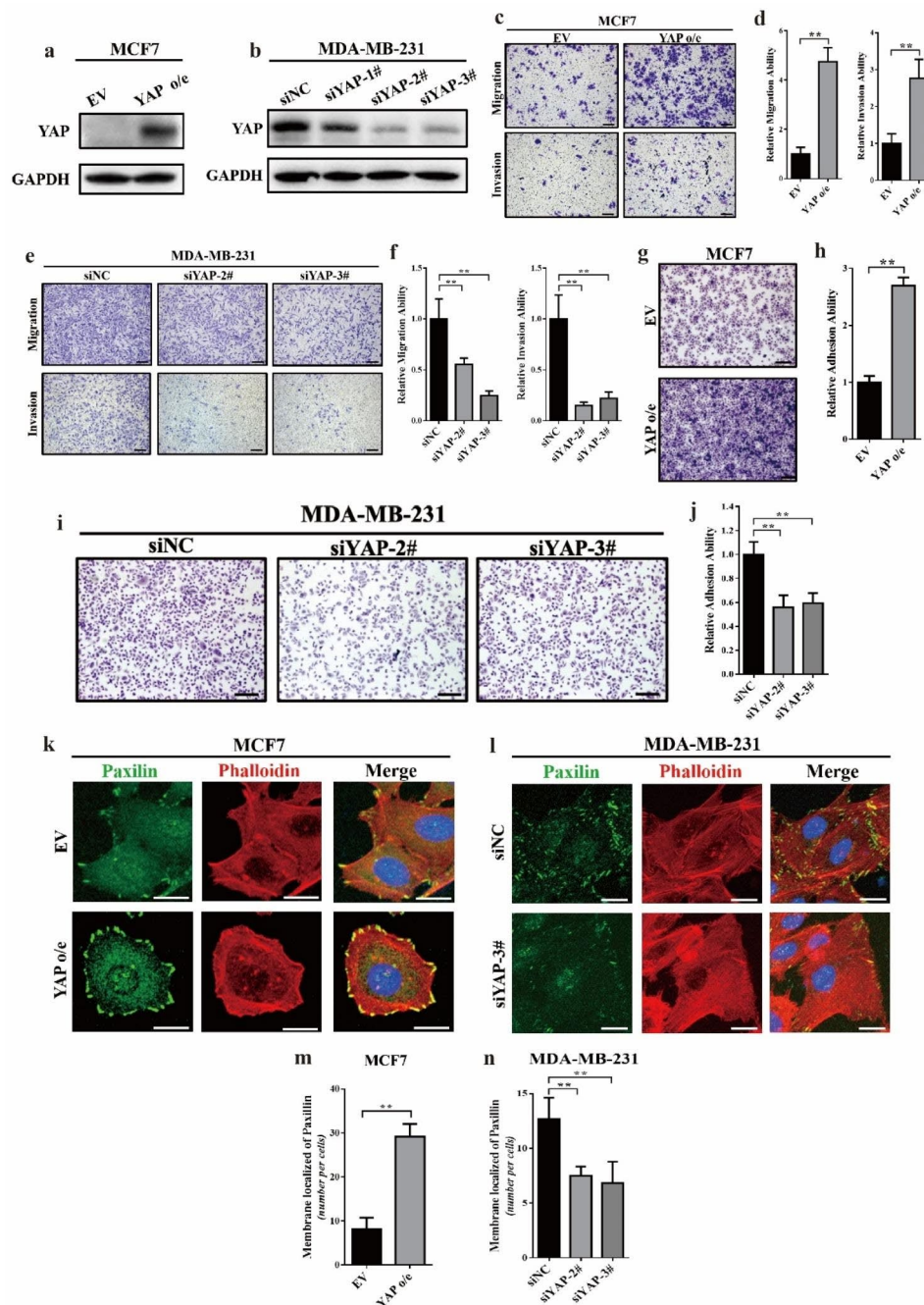


Fig. 2 YAP was able to induced cell migration, invasion and focal adhesion in breast cancer cell lines. **(a)** Western blot verified the overexpression of YAP in MCF7 cells. EV: empty vector; o/e: overexpression. **(b)** Western blot verified the knockdown of YAP in MDA-MB-231 cells via a collection of siRNAs; siYAP-#2 and siYAP-#3 has relatively high knockdown efficiency, thus these two siRNAs were used in this research. **(c, d)** Transwell assay showing that overexpression of YAP induced cell migration and invasion ability in MCF7 cells. The experiment was performed in triplicate. $**p < 0.01$ by Student's t-test. Scale bar: 100 μ m. **(e, f)** Transwell assay showing that knockdown of YAP significantly inhibited cell migration and invasion ability in MDA-MB-231 cells. The experiment was performed in triplicate. $**p < 0.01$ by ANOVA test. Scale bar: 100 μ m. **(g, h)** Overexpression of YAP induced MCF7 cell adhesion to gelatin. The attached cells were stained with Wright's-Giemsa and are shown in **(g)**. The experiment was performed in triplicate. $**p < 0.01$ by Student's t-test. Scale bar: 100 μ m. **(i, j)** Knockdown of YAP significantly inhibited MDA-MB-231 cell adhesion to gelatin. The attached cells were stained with Wright's-Giemsa and are shown in **(i)**. The experiment was performed in triplicate. $**p < 0.01$ by Student's t-test. Scale bar: 100 μ m. **(k)** Overexpression of YAP induced focal adhesions in MCF7 cells. Focal adhesions were visualized by co-localization of paxilin (green) and F-actin (stained with phalloidin, red). Nuclei were counterstained with DAPI (blue). Scale bar: 20 μ m. **(l)** Knockdown of YAP expression inhibited focal adhesions in MDA-MB-231 cells. Scale bar: 20 μ m. **(m)** Quantification of the membrane-localized paxilin in **(k)**. The experiment was performed in triplicate. $**p < 0.01$ by Student's t-test. **(n)** Quantification of the membrane-localized paxilin in **(l)**. The experiment was performed in triplicate. $**p < 0.01$ by ANOVA test

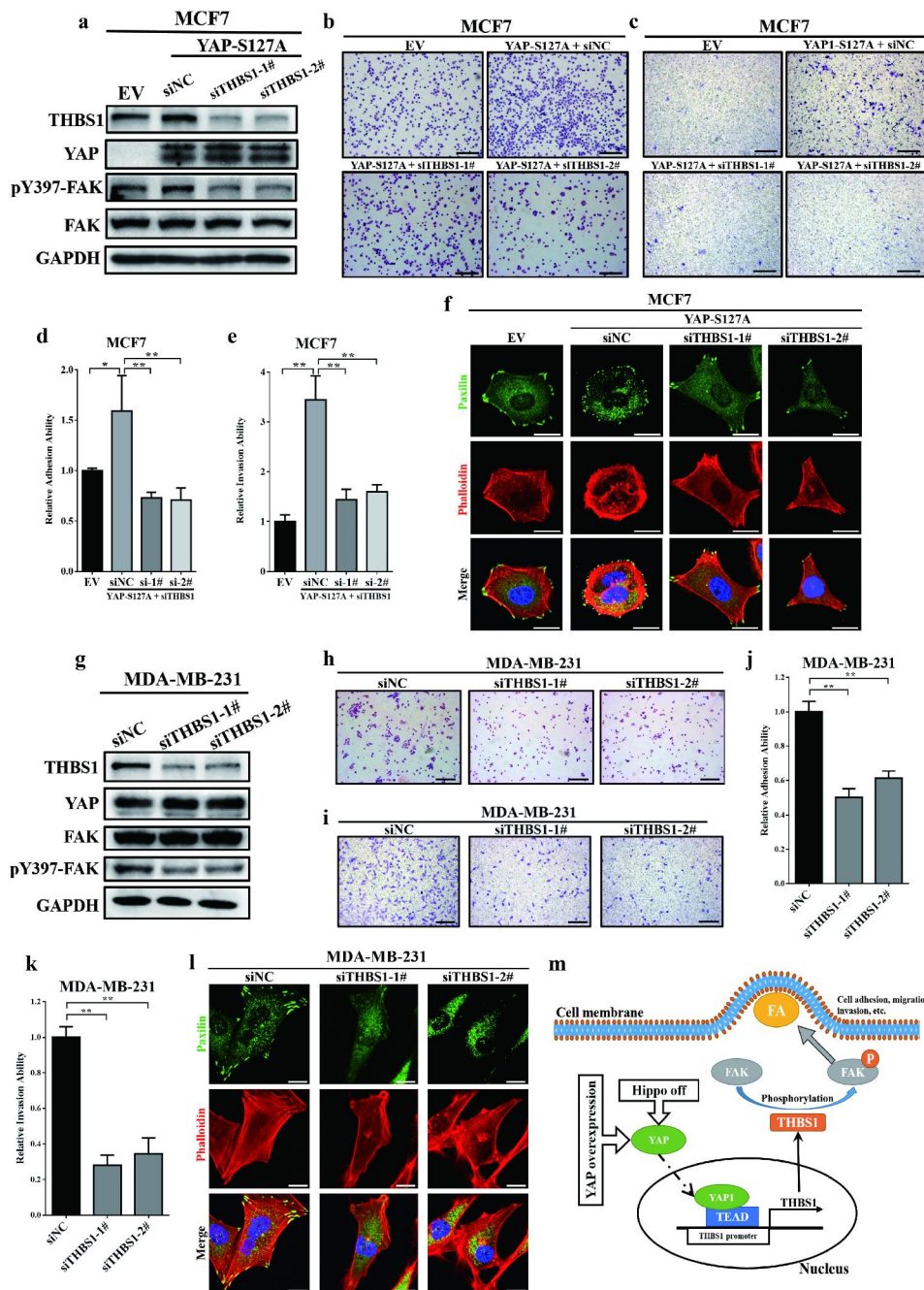


Fig. 6 YAP triggered FAK phosphorylation and focal adhesion through THBS1. **(a)** Western blot assays revealed that knockdown of THBS1 expression in MCF7-YAP-S127A cells could significantly reverse FAK Y397 phosphorylation. **(b)** Cell adhesion assays showed that knockdown of THBS1 could significantly reverse YAP-S127A-induced cell adhesion in MCF7 cells. The experiments were performed in triplicate. Scale bar: 100 μ m. **(c)** Transwell invasion assays showed that knockdown of THBS1 could significantly reverse YAP-S127A-induced cell invasion in MCF7 cells. The experiments were performed in triplicate. Scale bar: 100 μ m. **(d)** Quantification of the cell adhesion ability in **(b)**. * $p < 0.05$ and ** $p < 0.01$ by ANOVA test. **(e)** Quantification of the cell invasion ability in **(c)**. ** $p < 0.01$ by ANOVA test. **(f)** Knockdown of THBS1 inhibited focal adhesion in MCF7-YAP-S127A cells. Red: F-actin (stained with phalloidin); Green: paxillin; Blue: nucleus (stained with DAPI). Scale bar: 20 μ m. **(g)** Knockdown of THBS1 reduced FAK Y397 phosphorylation in MDA-MB-231 cells. **(h)** Knockdown of THBS1 expression reduced cell adhesion to gelatin in MDAMB-231 cells. The experiments were performed in triplicate. Scale bar: 100 μ m. **(i)** Transwell invasion assays showed that knockdown of THBS1 expression reduced cell invasion in MDA-MB-231 cells. The experiments were performed in triplicate. Scale bar: 100 μ m. **(j)** Quantification of the cell adhesion ability in **(h)**. ** $p < 0.01$ by ANOVA test. **(k)** Quantification of the cell invasion ability in **(i)**. ** $p < 0.01$ by ANOVA test. **(l)** Knockdown of THBS1 reduced focal adhesion in MDA-MB-231 cells. Red: F-actin (stained with phalloidin); Green: paxillin; Blue: nucleus (stained with DAPI). Scale bar: 20 μ m. **(m)** Model for how YAP regulates THBS1 expression and induces focal adhesion

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References

1. Shen J, Cao B, Wang Y, et al. Hippo component YAP promotes focal adhesion and tumour aggressiveness via transcriptionally activating THBS1/FAK

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