

## Supplementary tables

**Table S1 The sequences of shERa-36 and scrambled shRNA**

Name	Targeting sequence
Scramble	TTCTCCGAACGTGTCACGT
shERα-36-1	GCAATTATTCCTTGCCTTGC
shERα-36-2	GCGTTGCATCATAAACATAAGC

**Table S2** Sequences of primers used in this study

ERα-36:	Forward: 5'-CAAGTGGTTCCCTCGTGTCTAAAG-3'  Reverse: 5'-TGTTGAGTGTGGTTGCCAGG-3'
Nanog:	Forward: 5'-ATTCAGGACAGCCCTGATTCTTC-3'  Reverse: 5'-TTTTGCGACACTCTCTGC-3'
Oct4:	Forward: 5'- GGACCGTTGGTTGTGAGTTGT-3'  Reverse: 5'-TGCTCCAGCTTCTCCTTCTC-3'
Bmi1:	Forward: 5'-GCTGCCAATGGCTCTAATGAA-3'  Reverse: 5'- TGCTGGGCATCGTAAGTATCTT-3'

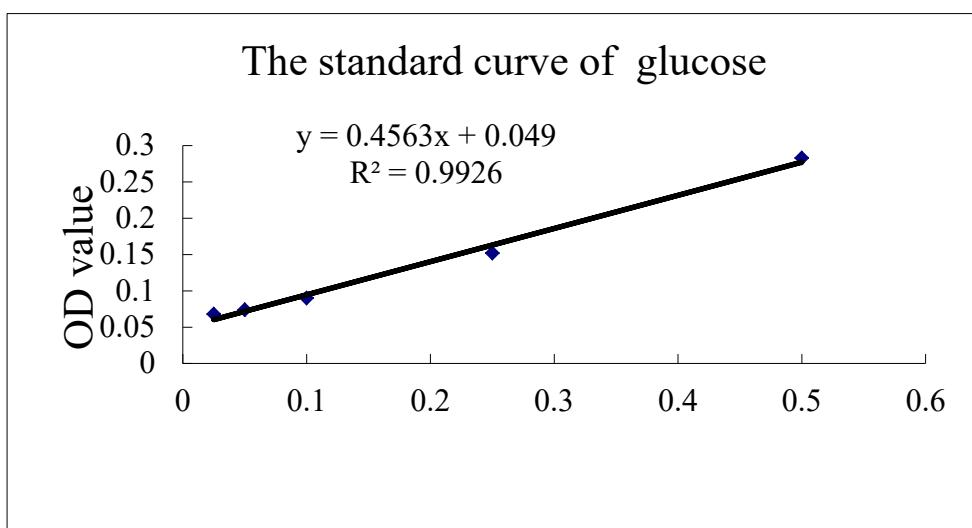
$\beta$ -actin: Forward: 5'-TTGCGTTACACCCTTCTTG-3'

Reverse: 5'- TTTGACCTTGCCACTTCCAC-3'

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## Supplementary Figures

A



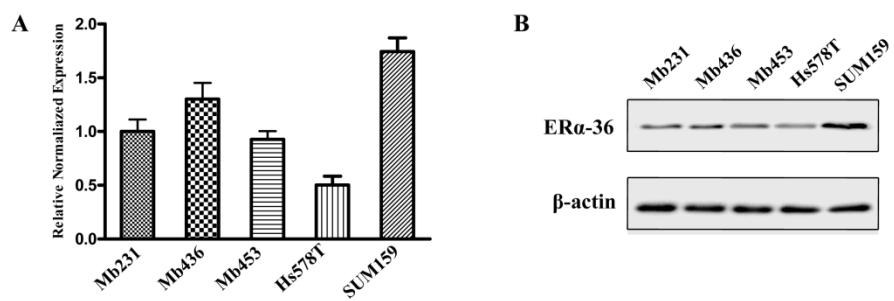
B

Concentration (mg/mL)	Absorbance
HP sample	0.093
Purity of HP	99.02%

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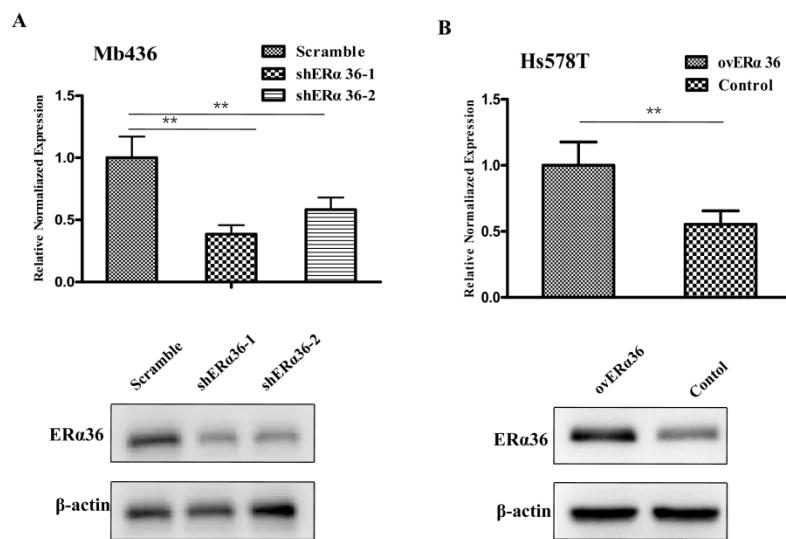
**Figure S1. Determination of polysaccharide purity**

A. The standard curve of glucose. B. The percentage of polysaccharides.



**Figure S2. The expression of ER $\alpha$ -36 in TNBC cells.**

A. ER $\alpha$ -36 expression at mRNA level in Mb231, Mb436, Mb453, Hs578T and SUM159 cells measured by qRT-PCR. B. ER $\alpha$ -36 expression at protein level in Mb231, Mb436, Mb453, Hs578T and SUM159 cells measured by western blot.



**Figure S3. The efficacy of ER $\alpha$ -36 knockdown and overexpression**

A. qRT-PCR and western blot assays showed the efficacy of ER $\alpha$ -36 knockdown in Mb436 cells.

B. qRT-PCR and western blot assays showed the efficacy of ER $\alpha$ -36 overexpression in Hs578T cells.