

**MicroRNA-101 targets von Hippel-Lindau tumor suppressor (VHL)
to induce HIF1 α mediated apoptosis and cell cycle arrest in
normoxia condition**

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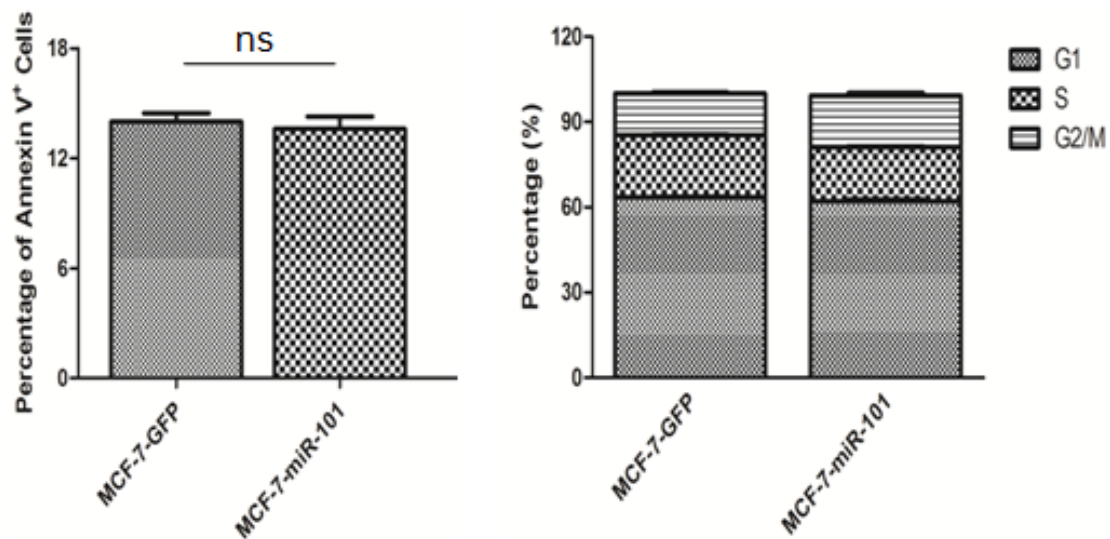


Figure S1. *miR-101* has no effect on apoptosis and cell cycle in MCF-7 cells under hypoxia exposure.

Apoptosis and cell cycle assays in MCF-7-miR-101 under hypoxia exposure.

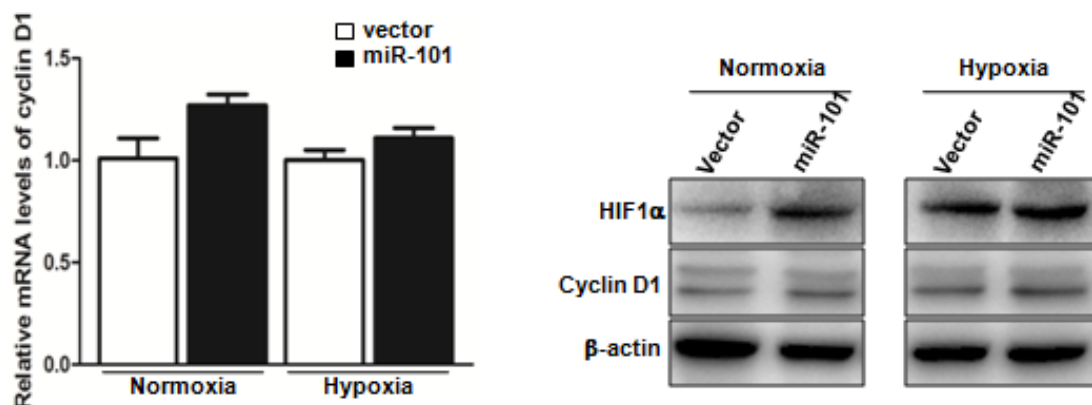


Figure S2. *miR-101* does not affect cyclinD1 levels in either normoxia or hypoxia condition.

mRNA and protein levels of CyclinD1 in MCF-7 cells with *miR-101* expression detected by qPCR and western respectively under normoxia or hypoxia condition.

A

EGLN2(PHD1)	hsa-miR-101-5p	NM_089732	17-42	3' UCUG-AGUCGUGACAC <u>UAUUGAC</u> 5' * ** ***** * 5' GCGAGCAGC--TTAA <u>ATGACTT</u> 3'
	hsa-miR-101-3p	NM_022051	1341-1364	3' AAGUC--AAATAGUG-UC <u>ADGACU</u> 5' ** ***** ** * 5' OCCAGCCTTCTT <u>ACTGTACTGAA</u> 3'
EGLN1(PHD2)	hsa-miR-101-3p	NM_022051	2450-2469	3' AAGUCAATAGUGUC <u>ADGACU</u> 5' ***** * * 5' ATAAAGCTTCATRA <u>TGCTGT</u> 3'
	hsa-miR-101-5p	NM_022051	1283-1305	3' UCGAGUCGUGACAC-- <u>UAUUGAC</u> 5' ***** ** * 5' ACTGACCG--AATGTGCA <u>GTAACTC</u> 3'
EGLN3(PHD3)	hsa-miR-101-5p	NM_022073	814-834	3' UCGAGU-CUGGAC <u>UAUUGAC</u> 5' * * ** * 5' TGTGTTAACCAC--TG <u>ATACTG</u> 3'
	hsa-miR-101-5p	NM_022073	1176-1198	3' UCGAGUCGUGAC---AC <u>UAUUGAC</u> 5' *** * ***** * 5' CAGATC-GCACTGCTCA <u>ATAACTT</u> 3'
P4HTM(PHD4)	hsa-miR-101-3p	NM_177938	146-170	3' AAGU-CAGUAG---UGUC <u>ADGACU</u> 5' * * ***** * 5' TTCATGTTATTATTG <u>TGACTGAC</u> 3'
	hsa-miR-103a-3p	NM_177938	57-82	3' AGU-ABCUGGA-CAGSUA <u>ACGACA</u> 5' * * ***** * 5' CCGCTGTCTCTGTG <u>CTGCA</u> 3'

B

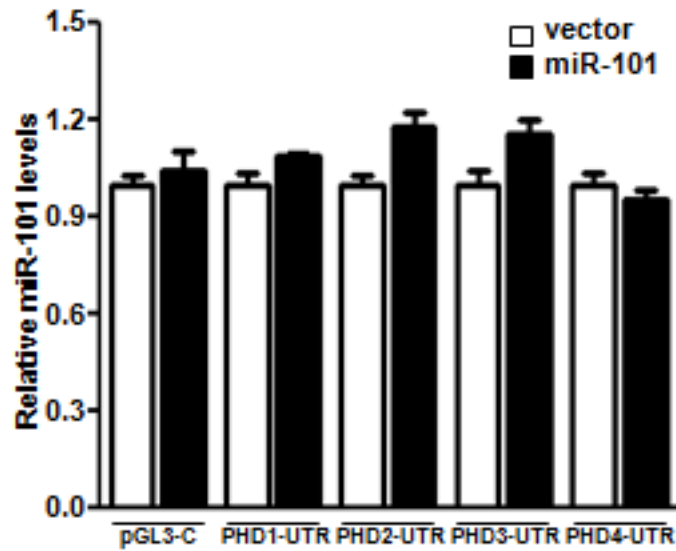


Figure S3. PHD1-4 are not the direct target of *miR-101*.

(A) Predicted binding sites of *miR-101* on the 3'UTR regions of PHD1-4 by FINDTAR3. (B) Effect of *miR-101* on the luciferase activity of pGL3-control, PHD1-UTR, PHD2-UTR, PHD3-UTR and PHD4-UTR.