cancers

MDPI

Supplementary Materials

# Integrin $\alpha 3\beta 1$ Represses Reelin Expression in Breast Cancer Cells to Promote Invasion

**Abibatou Ndoye, Rakshitha Pandulal Miskin and C. Michael DiPersio**

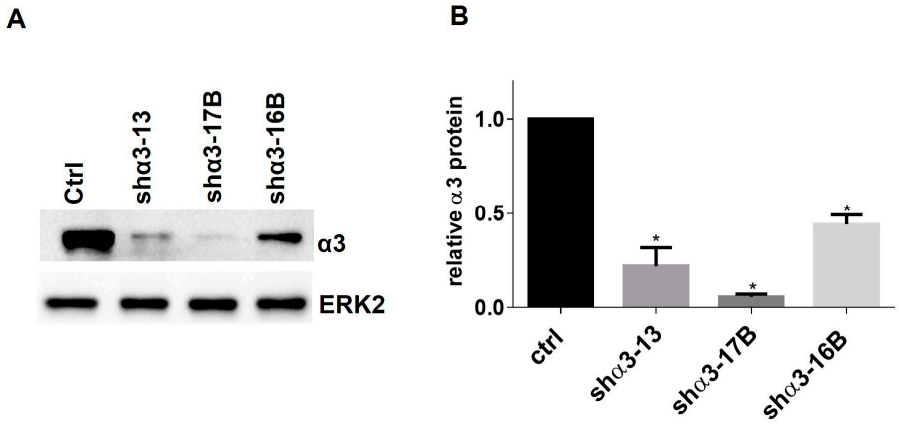


**Figure S1.** Measurement of $\alpha 3$ protein in $\alpha 3$-expressing and $\alpha 3$-deficient MDA-MB-231 cells. **A**. Representative western blot (non-reducing) of $\alpha 3$ in MDA-MB-231 cells transduced with control shRNA (ctrl) or three distinct $\alpha 3$-targeting shRNAs (sh$\alpha 3$-13, sh$\alpha 3$-17B, sh$\alpha 3$-16B); control, ERK2. **B**. Graph shows the quantification of $\alpha 3$ protein; data normalized to ERK protein levels. Data are average +/- SEM, n=3; *p ≤ 0.05; multiple t-test comparison with Sidak-Bonferroni correction.

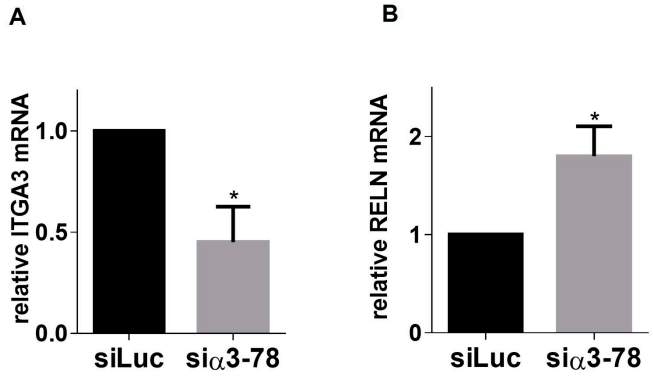


**Figure S2.** Measurement of RELN mRNA in SUM159 cells upon siRNA-mediated knockdown of ITGA3. **A, B**. qRT-PCR was performed to compare ITGA3 mRNA (A) or RELN mRNA (B) in SUM159 cells transfected with control siRNA (siLuc) or siRNA that targets $\alpha 3$ mRNA (si$\alpha 3$ -78). Data are average +/-SEM, n=3; *p ≤ 0.05, unpaired t-test.

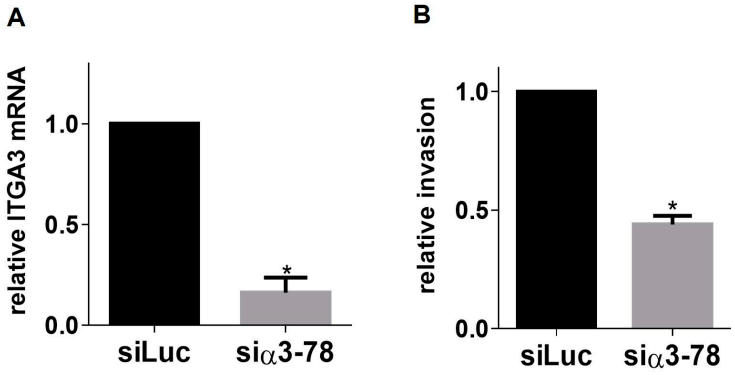


**Figure S3.** Invasion of MDA-MB-231 cells is reduced upon siRNA-mediated knockdown of ITGA3. **A**. qRT-PCR was performed to compare ITGA3 mRNA in MDA-MB-231 cells transfected with control siRNA (siLuc) or $\alpha$3-targeting siRNA (si$\alpha$3 -78). **B**. Invasive potential of MDA-MB-231 cells transfected with siLuc or si$\alpha$3-78 cells was compared using Matrigel invasion assays. Graph shows relative cell invasion. Data are average +/- SEM, n=3; *$p \leq 0.05$, unpaired t-test.