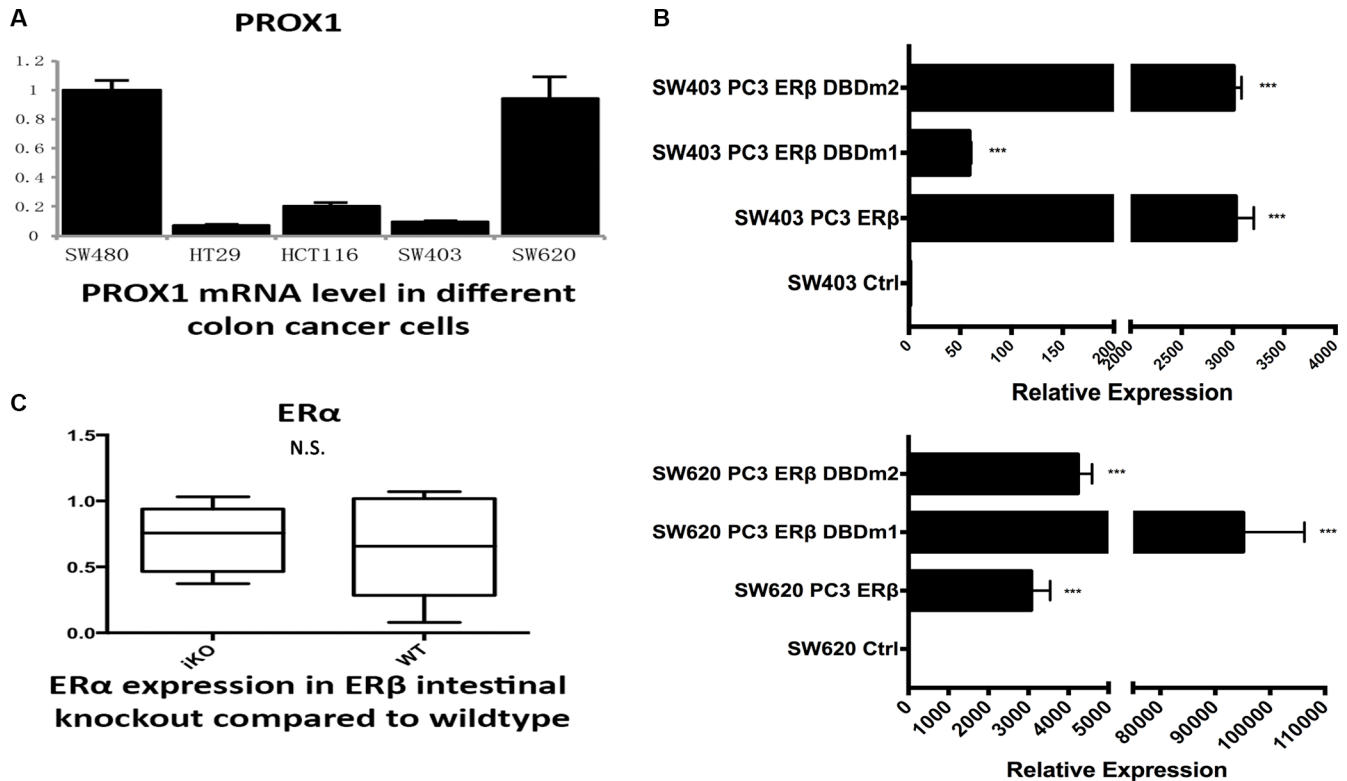


Estrogen receptor beta reduces colon cancer metastasis through a novel miR-205 - PROX1 mechanism

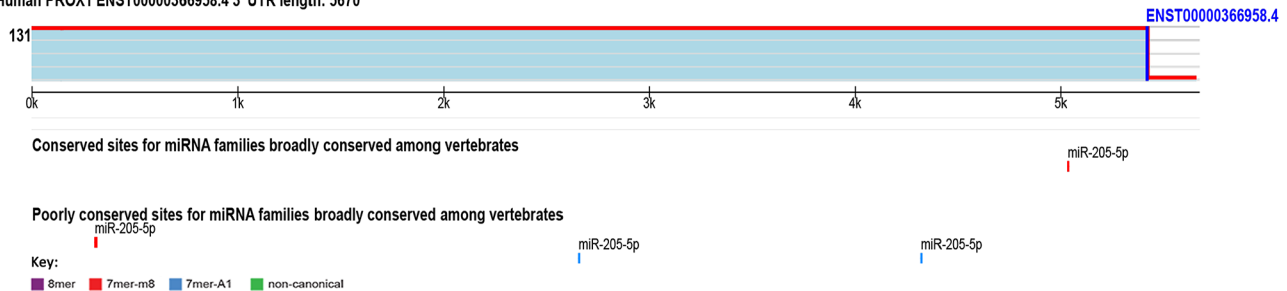
Supplementary Materials



Supplementary Figure S1: mRNA levels measured by qPCR. (A) PROX1 in different colorectal cancer cell lines. The inverse correlation between miR-205 and PROX1 mRNA levels ($r = -0.44$) were not significant ($p = 0.09$). (B) Expression of transiently transfected ERβ and ERβ-DBD mutant corroborated in SW403 and SW620 cell lines. ($*P < 0.05$, $**P < 0.01$, Student's t -test). C. Expression of ERα in colon epithelial scrape from intestine-specific ERβ knockout mice (iKO) and corresponding controls (WT) is not changed.

Mir205 TargetScan

Human PROX1 ENST00000366958.4 3' UTR length: 5670



Supplementary Figure S2: Predicted miR-205 sites of PROX1 3'UTR using Targetscan. In this study we demonstrate that the site at position 291-313 nt 3' of the coding sequence (to the left in figure) *de facto* interacts with miR-205.

Supplementary Table S1: Correlation between ER β , Prox1, and miR-205 in ER β ^{ikO} mouse colon tissue

	PROX1	miR-205
ER β	-0.38 ($p = 0.037$)	0.51 ($p = 0.028$)
PROX1		-0.05 ($p = 0.048$)

Expression of ER β is correlated to miR-205 expression, while inversely correlated to *Prox1* expression. Correlations were analyzed using Pearson correlation, and considered significant if $p < 0.05$.