

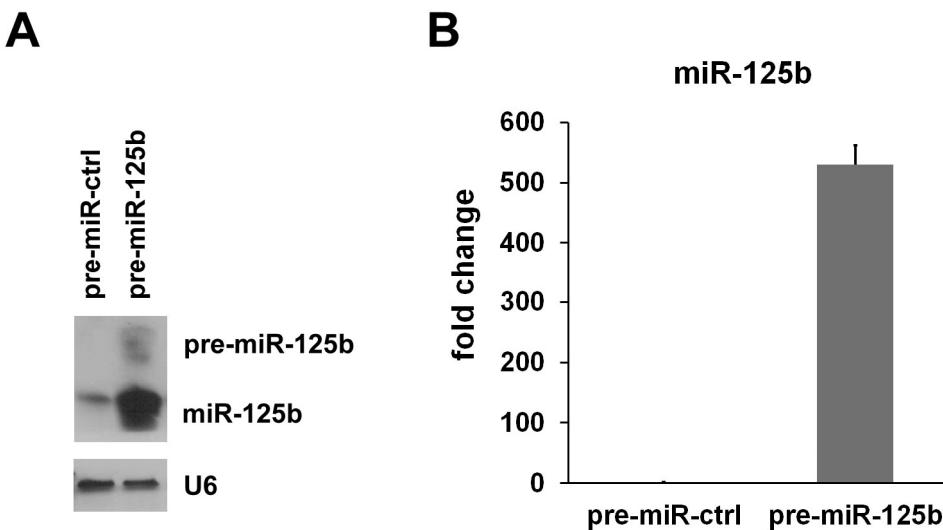
# Supplementary Information

**Table S1.** Primers used for qPCR.

Name <sup>a</sup>	Forward primer	Reverse primer	Application
Cerberus	ACTGTGCCCTCAACCAGACCATTG	TGCCCTTCTCCGGGAAACGA	RT-qPCR
Cripto	ATCCAGTGTGGTTTGCTTGTG	TCTCTGATGGCAAGGTCTCTCC	RT-qPCR
Dnmt3b	CCAAGGACACCAGGACGCGC	TCCGAGACCTGGTAGCCGGAA	RT-qPCR
Fgf5	CCTCATCTTCTGCAGGCCACCTGATC	GTTCCGAGCCGCTTCCTGGCTGCC	RT-qPCR
Gapdh	GTATGACTCCACTCACGGCAA	TTCCCATTCTCGGCCTTG	RT-qPCR
Id1	GAGCAGCAGGTGAACGTCTT	TCCTTGAGGCCTGAGTAGCA	RT-qPCR
Id3	GTAAGAGCCCCTGACCGA	GCAGTGGTTCATGTCGTCCA	RT-qPCR
Klf2	CCAACTGCGGCAAGACCTAC	CAATGATAAGGCTTCTCACCTGTGT	RT-qPCR
Klf5	GGTCAGACAAGATGTGAAATGG	TTTATGCTCTGAAATTATCGGAAC	RT-qPCR
Lefty1	CTCGGGTCACCATTGAATGG	TGGACACGAGCCTAGAAC	RT-qPCR
Lefty2	GTCACCATTGAATGGCTGAGAG	GTGGATGGACACGAGCCTAGAG	RT-qPCR
Lin28	GTTCGGCTTCTGTCTATGACC	CTTCCATGTGCAGCTGCTCT	RT-qPCR
Nanog	TCAGAAGGGCTCAGCACCA	GCGTTCACCAAGATAGCCCTG	RT-qPCR
Nodal	CCTCCAGGCAGAAGATGT	ACCAGATCCTCTTGGCTCA	RT-qPCR
Oct3/4	AACCTTCAGGAGATATGCAAATCG	TTCTCAATGCTAGTCGCTTCTCT	RT-qPCR
Pax6	AGTGAATGGCGGAGTTATG	ACTTGGACGGAACTGACAC	RT-qPCR
pri-miR-125b-1	GAGTCTGCAACCGAAATTGCCTG	GTTCCTTCAGCGATGCAAAGGC	RT-qPCR
pri-miR-125b-2	GCTGTCCGTTTACCTGGAAGAAG	CTGGTGGTTATGCCGAGAAC	RT-qPCR
Fgf5	AGGGACGGTCAAGATTCTT	AGAACCCAGCAGAGTCCCAGA	ChIP-qPCR
Nanog	TGTGAGCTCAGTGCCTTCCAAA	TTCAGACCTGGCTCCAGATGCTA	ChIP-qPCR
Klf2	TGCAGATCTTGAGGGCCTAGTTGT	TCCCATGGAGAGGGATGAAGTCAA	ChIP-qPCR

<sup>a</sup>The primer name is reported as indicated in the Figures.

**Figure S1.** miR-125b level upon pre-miR transfection. (A) RNA samples prepared from ESCs transfected with the control pre-miR and pre-miR-125b were subjected to Northern blot analysis with a specific probe for miR-125b that reveals the level of pre-miR and mature miR. U6 snRNA was used as a loading control; (B) TaqMan microRNA analysis to evaluate the level of miR-125b in ESCs transfected with the control pre-miR and pre-miR-125b. The data are expressed as fold change relative to the control.



**Figure S2.** Oct3/4 level in 4 days differentiated ESCs upon pre-miR transfection. The protein levels of Oct3/4 were measured by western blot in ESCs transfected with the indicated pre-miR and differentiated as SFEBs for 4 days .

