Table 2. Pseudogenes aberrantly expressed in human cancer and validated miRNAs binding to their cognate *wt* genes.

Pseudogene	Role in human cancer	*wt* gene	Validated miRNA families	Conservation of the binding site between *wt* and pseudo
PTENP1	*see text*	*PTEN*: *see text*	***miR-17*** **yes** ***miR-19*** **yes** ***miR-21*** **yes** ***miR-26*** **yes** ***miR-214*** **yes** *miR-216* no *miR-217* no	
ψCX43	specifically expressed in breast cell lines (not in normal mammary epithelium)[1]	*CONNEXIN 43 (CX43)*: one of the monomers that compose gap junctions. CX43 expression is aberrantly lost in cancer.	***miR-1***[2]	**yes**
NA88-A	specifically expressed in melanoma cell lines (not in normal melanocytes)[3]	*HPX42B*	-	
OCT4-pg1 *OCT4-pg5*	specifically expressed in cancer cell lines and tissues (not in normal tissues)[4]	*OCT4*: transcription factor expressed in embryonic stem cells where it plays a critical role in mantaining the pluripotent and self-renewing state. Oct4 is aberrantly expressed in cancer cells.	***miR-145***[5] *miR-470*[6]	**yes** *miR-470* is mouse-spec
NANOGP8	specifically expressed in cancer cell lines and tissues (not in normal fibroblasts and fetal liver)[7]	*NANOG*: transcription factor expressed in embryonic stem cells where it plays a critical role in mantaining the pluripotent and self-renewing state. Oct4 is aberrantly expressed in cancer cells	*miR-134*[8] *miR-296*[6]	no* *miR-296* binding sites are not conserved between human and mouse
ψBRAF	specifically expressed in thyroid tumor samples (especially if they don't carry BRAF mutations), and not in normal thyroid[9]	BRAF: Ser/Thr kinase that serves as downstream effector of RAS in the MAPK signaling cascade. Mutations that render BRAF constitutively active are common in cancer.	-	-

The conservation of *miR-17*, *19*, *21*, *26* and *214* binding sites in *PTENP1* has been discussed elsewhere **(Fig. 1)**. The asterisk indicates those *wt*/pseudogene pairs that show an overall low sequence conservation (<60%).

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