

Table 2. Reported function of aberrantly expressed miRNAs in endometriosis

miRNA	Expression	Target gene expression	Function	References
miR-20a	Upregulated in ESCs	Downregulation of DUSP2	Augmentation of PGE2-induced FGF-9 expression, induction of prolonged ERK phosphorylation, and induction of EGR-1, CYR61, and osteopontin	Lin <i>et al.</i> , 2012
miR-23a/b	Downregulated in endometriotic tissues and eutopic endometrium of endometriosis patients	Downregulation of steroidogenic factor-1	Inhibition of estrogen biosynthesis	Shen <i>et al.</i> , 2013
miR-145	Downregulated in endometriotic tissues	Downregulation of fascin-1, SOX2, MSI2, OCT4, KLF4, podocalyxin, JAM-A, and PAI-1 Upregulation of ACTG2 and transgelin	Inhibition of proliferation Induction of invasiveness Reduction of side population and aldehyde dehydrogenase-1 activity	Adammek <i>et al.</i> , 2013
miR-183	Downregulated in endometriotic tissues	N.D.	Induction of apoptosis, Inhibition of invasiveness	Shi <i>et al.</i> , 2014
miR-196b	Downregulated in ESCs	Suppression of c-myc and bcl-2	Inhibition of proliferation Induction of apoptosis	Abe <i>et al.</i> , 2013
miR-199a-5p	Downregulated in serum of endometriotic patients	VEGFA	Inhibition of proliferation, motility, and angiogenesis	Hsu <i>et al.</i> , 2014
miR-302a	Upregulated in ESCs	Suppression of COUP-TFII	Induction of COX-2	Lin <i>et al.</i> , 2014

ACTG2, smooth-muscle actin isoform γ 2; COUP-TFII, Chicken ovalbumin upstream promoter-transcription factor II; COX-2, cyclooxygenase-2; CYR61, cysteine-rich angiogenic inducer 61; DUSP2, dual-specificity phosphatase-2; EGR-1, early growth response protein-1; ESCs, endometriotic stromal cells; FGF-9, fibroblast growth factor-9; JAM-A, junctional adhesion molecule A; KLF4, Kruppel-like-factor 4; MSI2, Musashi-2; N.D., not described; OCT4, octamer 4; PAI-1, plasminogen activator inhibitor 1; PGE2, prostaglandin E2; SOX2, SRY-box 2; VEGFA, vascular endothelial growth factor-A.