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GEBREMEDHN ET AL., SUPPLEMENTAL FIGURE LEGENDS

Supplemental FIGURE S1: Detection of Granulosa and luteinizing cell specific marker genes. Identity of granulosa cells and possible transformation into luteal cells were assessed by semi-quantitative PCR. Granulosa cell-specific marker gene *FSHR* was detected in granulosa cells both before and after plating. The Luteinizing cell marker gene (*LHR*) was not detected in the cells both before and after culture. RNA sample isolated from luteinizing granulosa cells derived from preovulatory dominant follicle on day 19 of estrous cycle was used as positive control. Genomic DNA (gDNA) was used as PCR positive control (**A**). *In vitro* culture decrease the expression of LH induced ovulatory genes (*PTX3*; **B**) and (*PTGS2*; **C**) signifying the absence luteinization (**B**).

Supplemental FIGURE S2: Genomic organization and sequence conservation of bovine miR-183~96~182 cluster miRNAs. MiR-183~96~182 cluster is transcribed from intergenic region of chromosome 4 of bovine genome. Members of the miRNA cluster have higher sequence homology with similar seed region (**A**). Members of the miRNAs cluster are evolutionarily conserved across different mammalian species. bta*, Bos taurus;* has*, Homo sapiens;* mmu*, Mus musculus;* rno*, Rattus norvegicus* (**B**).

Supplemental FIGURE S3: *FASL* is not a predicted target gene of miR-183~96~182 cluster miRNAs. MiRNA target prediction using target scan 6.0 [55-57] showed that the 3´-UTR of bovine *FASL* harbors the binding sites of several miRNAs. However, there are no conserved binding sites for the miR-183~96~182 cluster miRNAs.

REFERENCES USED IN SUPPLEMENTAL DATA

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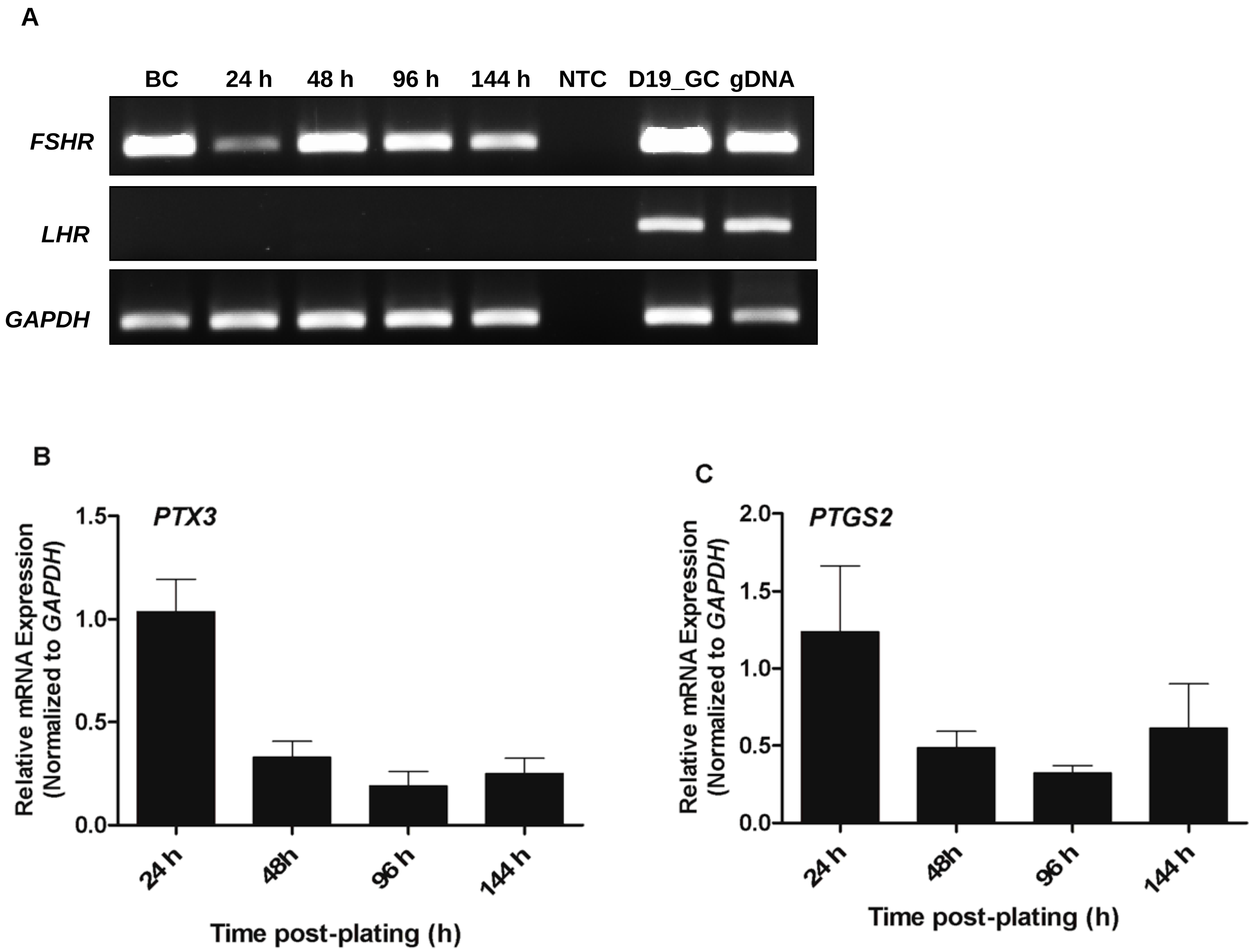

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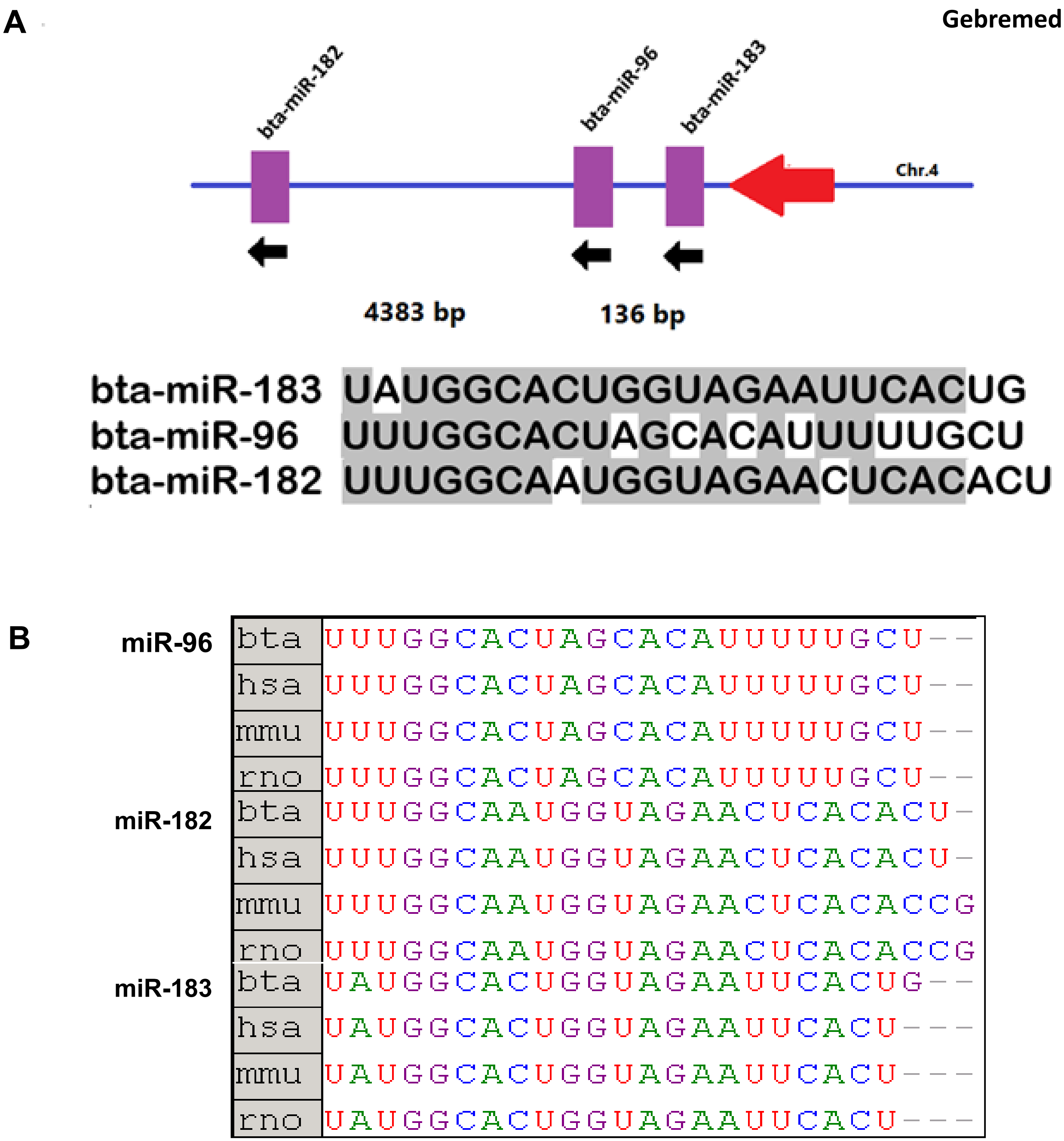
Gebremedhn et al., Supplemental Figure S2



bta-miR-183 UAUGGCACUGGUAGAAUUCACUG
bta-miR-96 UUUGGCACUAGCACAUUUUUGCU
bta-miR-182 UUUGGCAAUGGUAGAACUCACACU

miR-96	bta	UUUGGCACUAGCACAUUUUUGCU--
	hsa	UUUGGCACUAGCACAUUUUUGCU--
	mmu	UUUGGCACUAGCACAUUUUUGCU--
	rno	UUUGGCACUAGCACAUUUUUGCU--
miR-182	bta	UUUGGCAAUGGUAGAACUCACACU-
	hsa	UUUGGCAAUGGUAGAACUCACACU-
	mmu	UUUGGCAAUGGUAGAACUCACACCG
	rno	UUUGGCAAUGGUAGAACUCACACCG
miR-183	bta	UAUGGCACUGGUAGAAUUCACUG--
	hsa	UAUGGCACUGGUAGAAUUCACU---
	mmu	UAUGGCACUGGUAGAAUUCACU---
	rno	UAUGGCACUGGUAGAAUUCACU---

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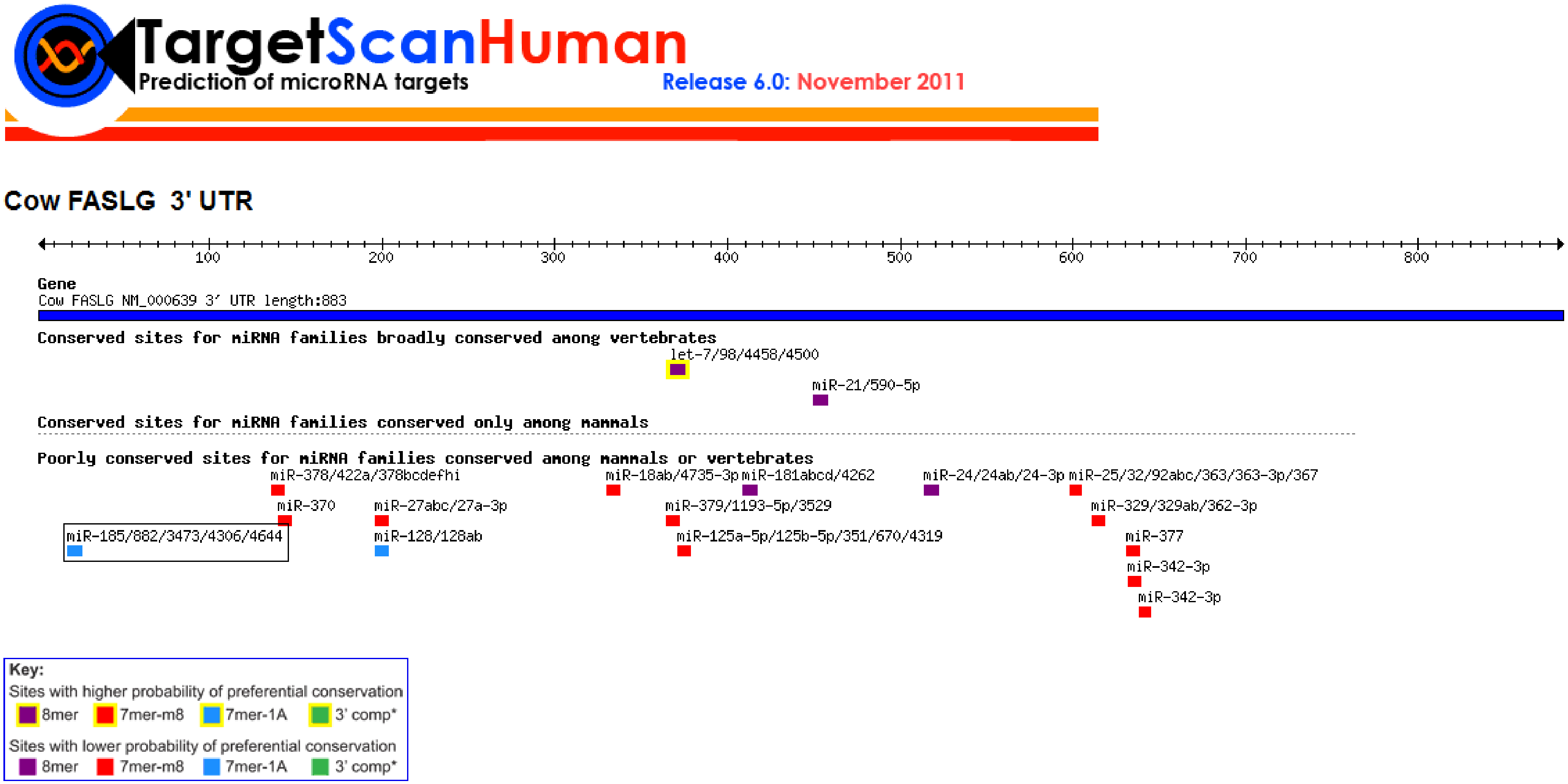

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