



**Figure S1.** Verification of the bovine *H19* differentially methylated region.

To confirm the methylation status of the *H19* DMR included in this investigation it was analysed using three techniques. Combined Bisulfite Restriction Analysis (A) and bisulfite sequencing show that this DMR is hypomethylated in the oocyte and hemi-methylated in liver. Pyrosequencing analysis of the same region confirmed these observations in oocytes and liver and also illustrated that *H19* is hypermethylated in sperm DNA.