Reviewer's report

**Title:** Methylation of class II transactivator gene promoter IV is not associated with susceptibility to Multiple Sclerosis

**Version:** 2  **Date:** 29 May 2008

**Reviewer:** steven Gray

**Reviewer's report:**

Discretionary Revisions

These are recommendations for improvement which the author can choose to ignore. For example clarifications, data that would be useful but not essential.

Please explain the faint bands observable in Figure 2 lane 5 (unmethylated DNA/methylated primers)? Is there a cycle issue in the PCR as one would expect to see no band. I would also like an explanation for the band which lies between lane 1 and lane 2 (methylated DNA/unmethylated primers). As the dan is commercially generated one would not expect to see amplification, and so I would suggest that either the number of PCR cycles be reduced, or the annealing temperature increased to remove these apparent "false" positives

I would suggest redoing the Figure, but with less cycles (as clearly the amplification will occur in the expected samples lanes 1, 6)

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

'I declare that I have no competing interests'