Reviewer's report

**Title:** Selective antiproliferative activity in HPV-positive cells of novel intracellular antibodies against the HPV16 E7 oncoprotein and characterization of their binding to E7

**Version:** 1  **Date:** 16 December 2010

**Reviewer:** Eugene Toy

**Reviewer's report:**

This paper represents a continuation of this group's important work using intracellular antibodies to target E7 oncogenic function in an region distinct from the pRb binding site. This complementary approach is novel and deserves further investigation as a potential tool for targeted biologic therapy in the treatment of HPV related diseases.

**Discretionary Revisions:**

1. The main body of this work reflects the mapping and characterization of epitope specific antibody constructs which were found NOT to correspond to the pRB binding site. This is the novelty of the work in my opinion since you have already shown in your previous work the antiproliferative effects of your intracellular antibodies (Int J Cancer 2005). The title should emphasize this novel work.

2. I would consider mentioning the limitations of the CFA as opposed to your BRDU incorporation assay from 2005 allowing for some variances in the C33a data in Figure 2B. Also, I would include the p values if there indeed us statistical significance as in your 2005 paper.

3. Lastly, if stability of the fragments is an issue, I would mention in your conclusion that delivery and bioavailability of the targeted recombinant antibodies could be an obstacle to clinical treatment which is potentially circumvented by these particular constructs.

**Level of interest:** An article of importance in its field

**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'