Reviewer’s report

Title: Estrogen regulation of TRPM8 expression in breast cancer cells

Version: 2 Date: 8 March 2010

Reviewer: Roland Schoenherr

Reviewer’s report:

The revised manuscript version is improved by new data, specifically by the addition of Western blot and IP experiments.

Specifically, to the previously raised questions:

I) I still do not consider the semi-quantitative PCR data as fully satisfying. Nevertheless, the use of more than one primer pair in these experiments, as stated by the authors, makes the qualitative tendencies shown in the article more trustworthy.

II) The authors performed the proposed experiments and could provide additional new information. They showed that estrogen does not increase the Ca2+ levels induced by Icilin, but that the fraction of TRPM8-expressing cells is modulated.

III) As an important improvement, the authors show Western blot and IP data to support the expression analysis that was in the previous version solely based on RT-PCR. Therefore the demanded control RT-PCR is no longer required.

Discretionary Revision:

For all given values derived from gel analysis after semi-quantitative RT-PCR, please do not give two-digit decimal places. This appears inappropriate, with respect to the uncertainties of end-point PCR and image analysis.

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 interest