Reviewer's report

Title: Identification of the murine ortholog of the human S100A7 (psoriasin) gene.

Version: 1 Date: 22 November 2004

Reviewer: joost schalkwijk

Reviewer's report:

General

This is a very useful study for those working on psoriasin because it paves the way to making a mouse knockout model for this interesting gene. Apart from its presumed role in chemotaxis and tumorigenesis, psoriasin was recently reported to be antimicrobial as well (ESDR meeting Vienna, by Harder et al) emphasizing its role in host defense. The study is carefully performed and well written. The authors make it very likely that mS100A15 is the true ortholog of human psoriasin.

Although I trust the data, I think that the authors should try to abandon semiquantitative RT-PCR and use realtime qPCR instead.

The significance of the RT-PCR data is borderline (p<0.05, one sided test) but luckily it is confirmed by ISH.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

none

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

I think that the abbreviations ER and Jab should be explained. In the case of Jab, some reference to its function should be made, for those not familiar with the author's previous work.
Page 6: second paragraph, some funny characters at least in my text.

Discretionary Revisions (which the author can choose to ignore)

Although oncology is not my field, I thought that squamous differentiation would mean that the tumour is well differentiated, and hence has a low grade of malignancy. At least in skin SCC this is true; when squamous differentiation is lost and the cell become more spindle shaped, the prognosis is much worse. I therefore assume that the observed association of psoriasin with squamous differentiation would point at a negative correlation with malignancy, or am I wrong? I would be inclined to interpret psoriasin expression as a part of the activated phenotype of epithelial cells undergoing squamous differentiation, as in psoriasis or well differentiated SCCs. I am not so sure about the presumed role in tumor progression. Maybe a suitable animal model as suggested by the authors could give more insight.
What next?: Accept after minor essential revisions

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

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I have no competing interests