Reviewer's report

Title: Hornerin, an S100 family protein, is functional in breast cells and aberrantly expressed in breast cancer

Version: 3 Date: 21 May 2012

Reviewer: Sandra Z Haslam

Reviewer's report:

The authors have satisfactorily addressed all of my concerns except for identification of hornerin in macrophages during lactation.

Major comment: In fig 3C the putative hornerin+ macrophages are in lactating mammary gland - they have failed to show by specific staining that these are indeed macrophages. They have submitted a supplemental fig 3 for murine and human mammary glands. These do show hornerin+ macrophages, but no developmental stage is given for these sections. Yet they state that they are observed during lactation and involution. They need to show that hornerin staining during lactation is indeed in macrophages and need to define the status of the murine and human glands in suppl fig 3, and modify text and figure legends to describe tissue status.

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.