Reviewer's report

Title: Signal transduction mechanisms involved in S100A4-induced activation of the transcription factor NF-kappaB

Version: 2 Date: 1 April 2010

Reviewer: guenter schneider

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In the revised version Grotterød et al. convincingly addressed my concern that, as recently published, H7 and staurosporine affects NF#B signaling by apoptosis-related cleavage of a IKK subunit. Furthermore, the authors now provide pan-I#B# western blots (figure 2). Herein, the decrease in phosphorylation of I#B# mediated by H7 or staurosporine co-treatment with S100A4 perfectly matches degradation of I#B#. The ratio of p-I#B#/pan-I#B# is even higher in cells co-treated with H7 or staurosporine and S100A4. In contrast, in kinase assays only a marginal induction of IKK activity by S100A4 (1.25 fold)(figure 5B) was observed. Therefore, there are some concerns whether H7/staurosporine a really directly regulating IKK in the model investigated or whether rather indirect effects are involved. Therefore, it would be important to discuss these topics in more detail or address it at the experimental level. However, since the main focus of the manuscript was to investigate signaling induced upstream of IKK, the manuscript should be considered for publication.

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