Reviewer's report

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

**Version:** 1  **Date:** 1 December 2009

**Reviewer:** Keizo KT Takenaga

**Reviewer's report:**

The authors previously found that exogenously added S100A4 activated NFkappaB through phosphorylation of IkappaB. In this paper, they further pursued the signal transduction mechanisms located upstream of IkappaB. They found that S100A4 treatment phosphorylated IKKalpha/beta in an H7- and staurosporin-insensitive manner, resulting in the phosphorylation of IkappaB, independently of the putative S100 protein receptor RAGE. They also demonstrated that MEKK1, NIK or AKT was not involved in the S100A4-induced NFkappaB activation. The manuscript is well written and the data support the conclusion drawn.

**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.