Author's response to reviews

Title: Nobiletin Suppresses Cell Viability through AKT Pathways in PC-3 and DU-145 Prostate Cancer Cells

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Author's response to reviews: see over
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Dr. Christopher Morrey
Executive Editor
*BMC Pharmacology & Toxicology*

Dear Dr. Morrey:

I am writing you this letter to submit our revised manuscript titled “Nobiletin suppresses cell viability through AKT pathways in PC-3 and DU-145 Prostate Cancer Cells” to *BMC Pharmacology & Toxicology*.

Reviewers’ comments and suggestions for improving our manuscript are very helpful. We have formatted our manuscript according your journal’s format. We have also addressed the reviewer’s question below.

**Reviewer’s report:**
In Figure 7, the author choice P50 represents NF-KB, but while we study NF-KB, we usually use P65 and phosphorylation I-kB. Only when we found I-kB was translocated or not we can say NF-KB pathway was activated or inactivated.

Answers to the reviewer’s question: Seven proteins encoded by five genes are involved in the NF-κB complex, namely p105, p100, p50, p52, p65, c-REL and RELB. P65/p50 is the most commonly found heterodimer complex among NF-κB homodimers and heterodimers, and is the functional component participating in nuclear translocation and activation of NF-κB. Since P65/p50 coexists as a heterodimer complex, either P65 or P50 can be chosen to represent nuclear NF-kB. Only when the I-kB was phosphorylated and then dissociated from NF-kB, the p65-p50 complex can be translocated into the nucleus. We separated the nucleus from the whole cells and checked the protein of p50 in the nucleus which means it is activated. So it should be enough to prove the NF-KB pathway was activated. Therefore, our choice of p50 is valid.

We hope that you will now find the new version acceptable for publication in *BMC Pharmacology & Toxicology*.

Sincerely,
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