

Supplementary Information

***Borrelia burgdorferi*-induced TLR2-NFκB canonical signaling is inhibited by gallic acid through targeting the CD14+ adaptor protein and p65 molecule**

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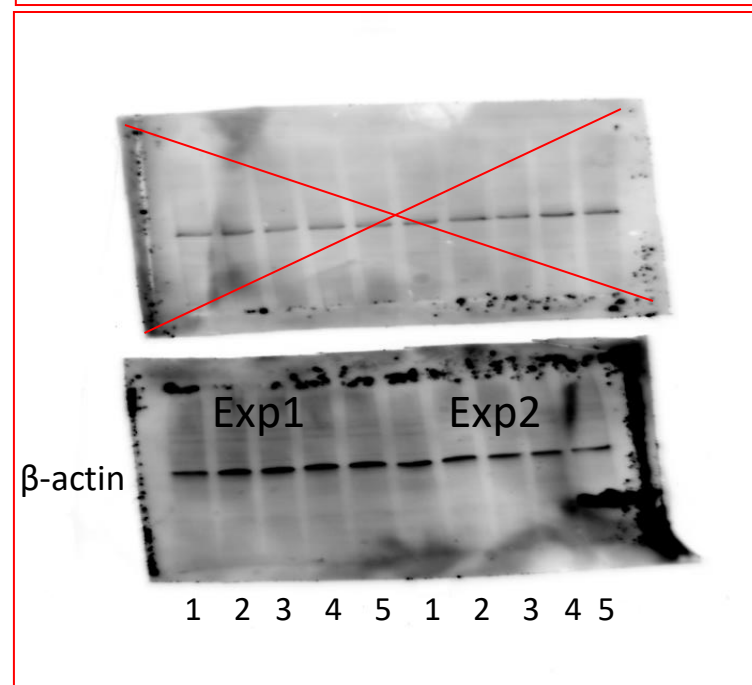
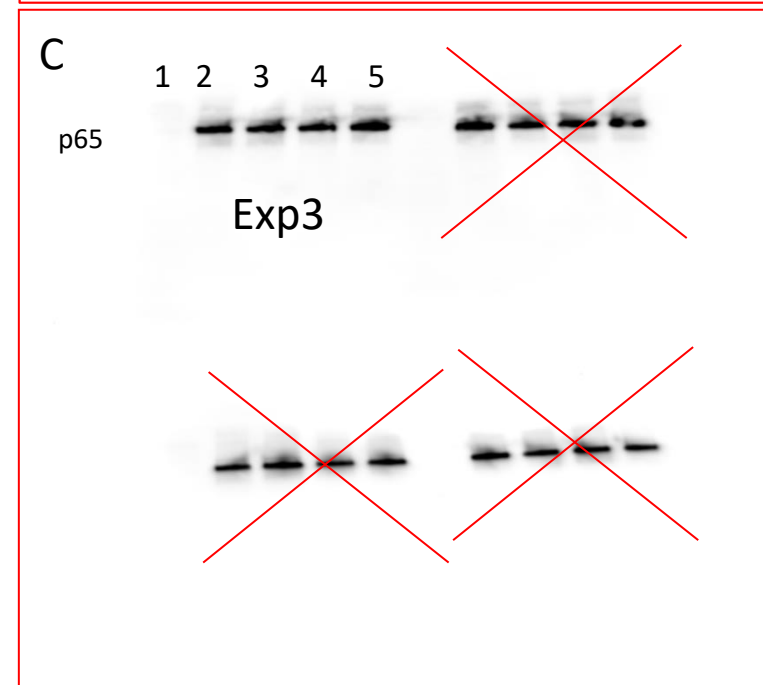
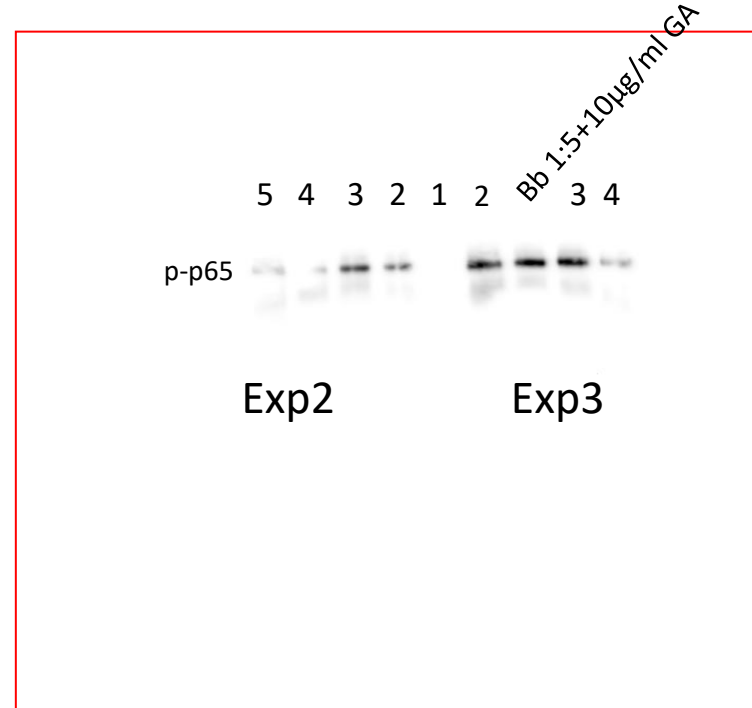
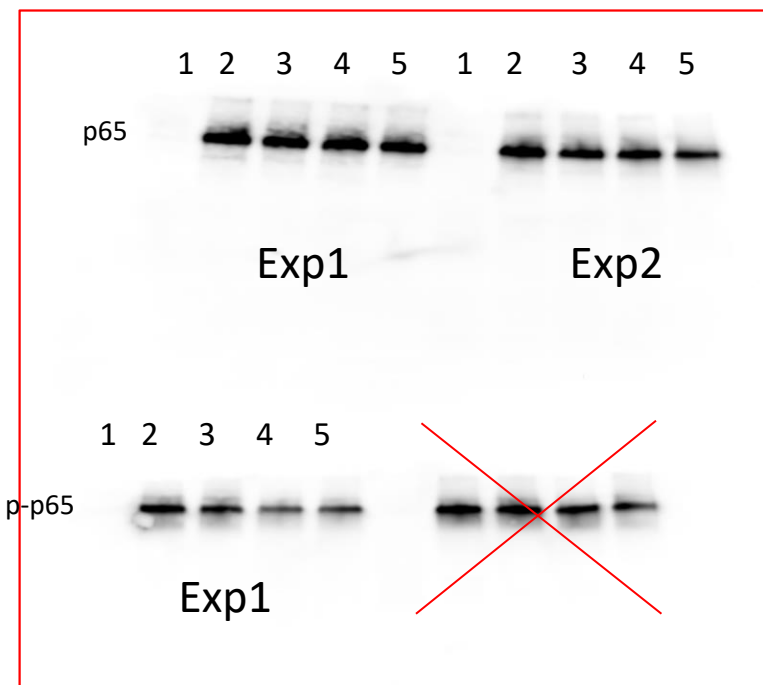


Figure S1a. Effect of gallic acid on NF κ B canonical signaling pathway. Human CD14⁺ monocytes were treated with gallic acid upon *Borrelia burgdorferi* 31 stimulation. Levels of proteins were assessed Western blot after 12 h post-treatment. 1 - control cells not stimulated with *Borrelia burgdorferi*; 2 - control cells stimulated with *Borrelia burgdorferi* at cells:bacteria 1:5 ratio; 3 - cells stimulated with *Borrelia burgdorferi* at cells:bacteria 1:5 and treated with gallic acid at 25 μ g/ml; 4 - cells stimulated with *Borrelia burgdorferi* at cells:bacteria 1:5 and treated with gallic acid at 50 μ g/ml; 5 - cells stimulated with *Borrelia burgdorferi* at cells:bacteria 1:5 and treated with gallic acid at 75 μ g/ml.

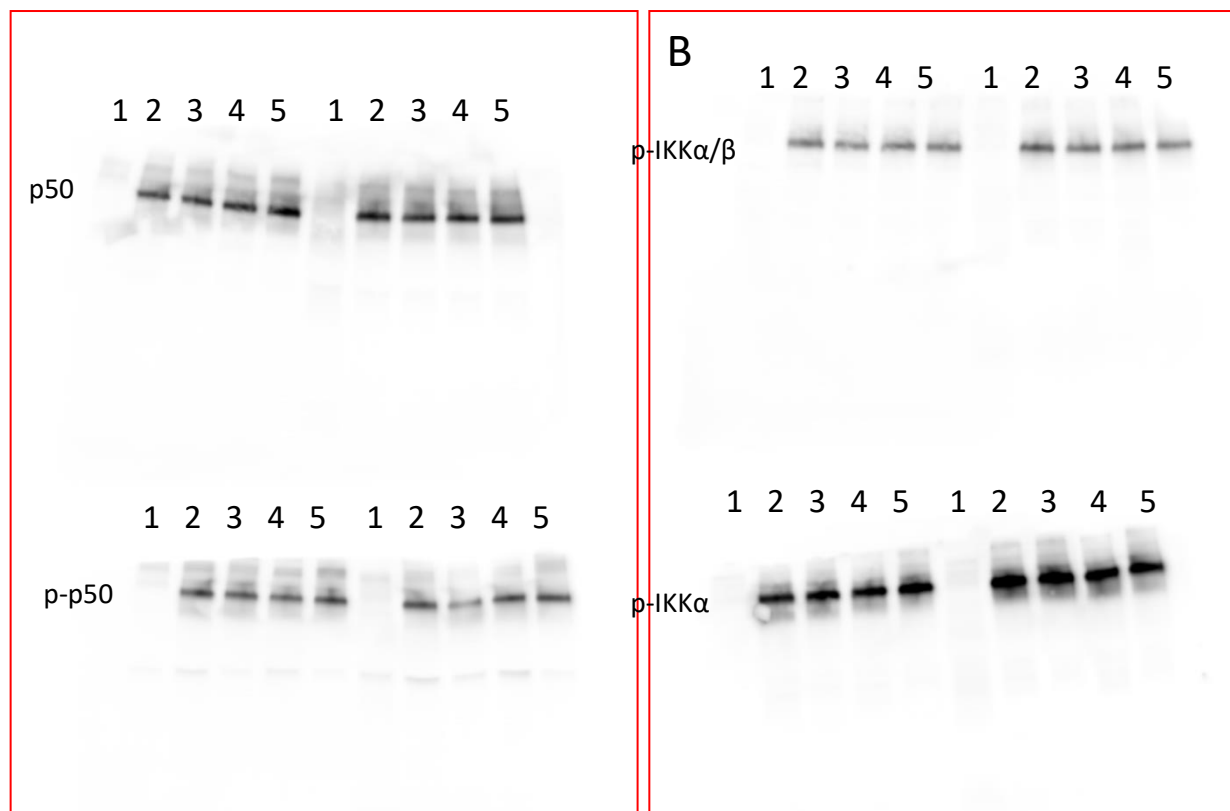


Figure S1b. Effect of gallic acid on NFκB canonical signaling pathway. Human CD14⁺ monocytes were treated with gallic acid upon *Borrelia burgdorferi* 31 stimulation. Levels of proteins were assessed by Western blot after 12 h post-treatment. 1 - control cells not stimulated with *Borrelia burgdorferi*; 2 - control cells stimulated with *Borrelia burgdorferi* at cells:bacteria 1:5 ratio; 3 - cells stimulated with *Borrelia burgdorferi* at cells:bacteria 1:5 and treated with gallic acid at 25 μg/ml; 4 - cells stimulated with *Borrelia burgdorferi* at cells:bacteria 1:5 and treated with gallic acid at 50 μg/ml; 5 - cells stimulated with *Borrelia burgdorferi* at cells:bacteria 1:5 and treated with gallic acid at 75 μg/ml.

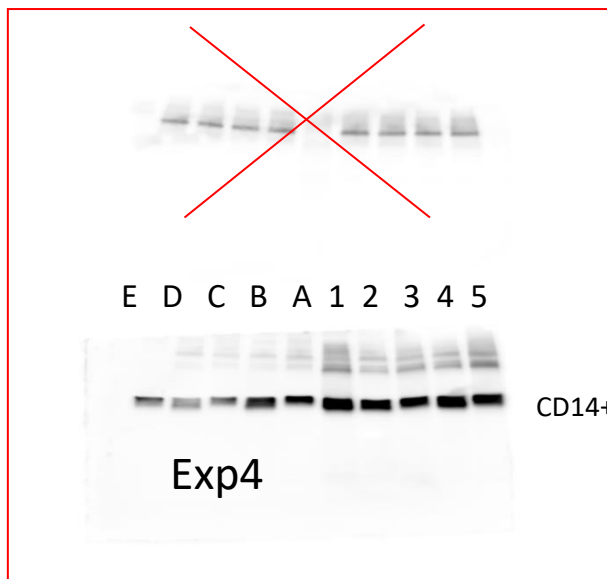
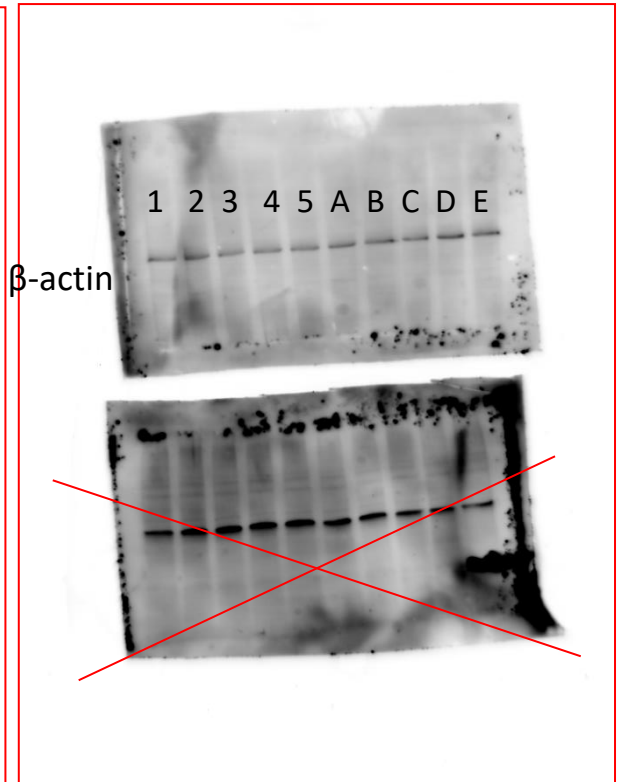
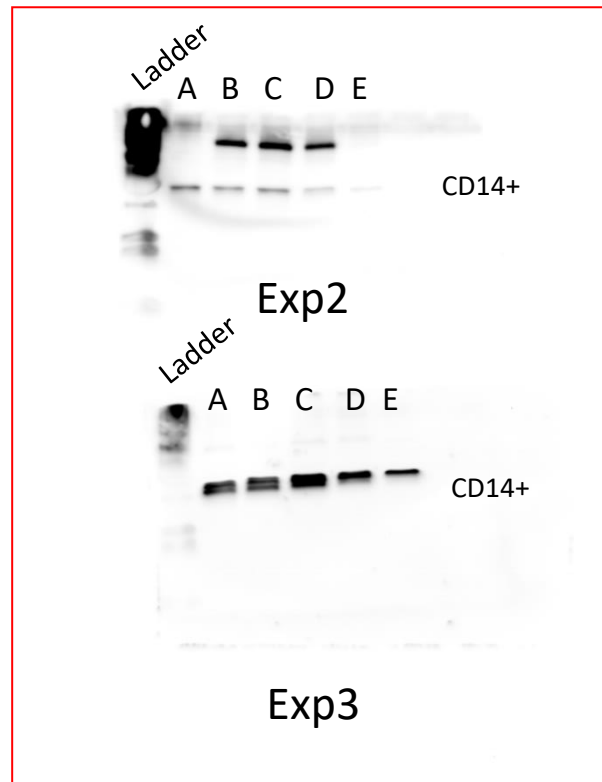
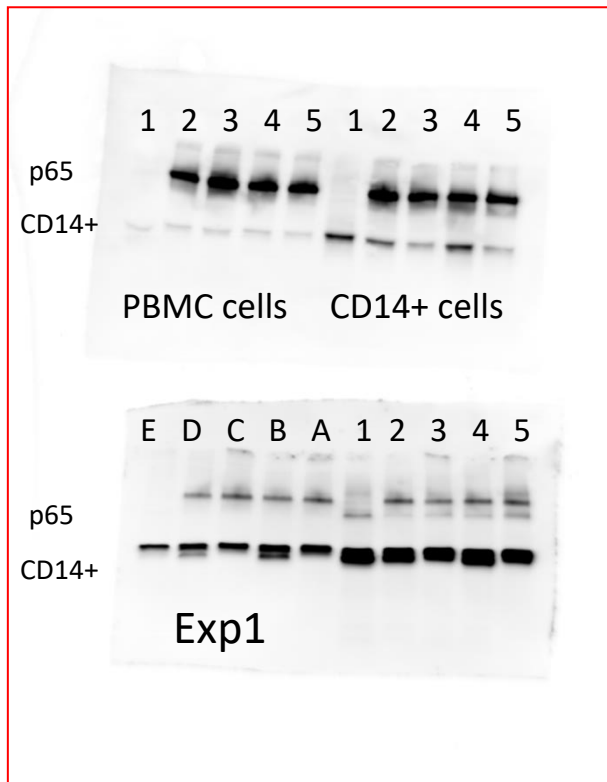


Figure S2. Effect of gallic acid on Toll-like receptor 2. Human CD14⁺ monocytes were treated with gallic acid upon *Borrelia burgdorferi* 31 stimulation. Levels of proteins were assessed Western blot after 12 h post-treatment. 1 - control cells not stimulated with *Borrelia burgdorferi*; 2 - control cells stimulated with *Borrelia burgdorferi* at cells:bacteria 1:5 ratio; 3 - cells stimulated with *Borrelia burgdorferi* at cells:bacteria 1:5 and treated with gallic acid at 50 μ g/ml; 4 - cells stimulated with *Borrelia burgdorferi* at cells:bacteria 1:10; 5 - cells stimulated with *Borrelia burgdorferi* at cells:bacteria 1:10 and treated with gallic acid at 50 μ g/ml; A - control cells not stimulated with *Borrelia burgdorferi*; B - control cells stimulated with *Borrelia burgdorferi* at cells:bacteria 1:5 ratio; C - cells stimulated with *Borrelia burgdorferi* at cells:bacteria 1:5 and treated with gallic acid at 25 μ g/ml; D - cells stimulated with *Borrelia burgdorferi* at cells:bacteria 1:5 and treated with gallic acid at 50 μ g/ml; E - cells stimulated with *Borrelia burgdorferi* at cells:bacteria 1:5 and treated with gallic acid at 75 μ g/ml.