

Supplementary Figure 1: Expression of NLRX1 in human cell lines. 1: HeLa, 2: HEK293T, 3: MCF-7, 4: Ramos, 5: Jurkat, 6: THP1. The following oligonucleotides were used to amplify NLRX1 and β-actin:

NLRX1:

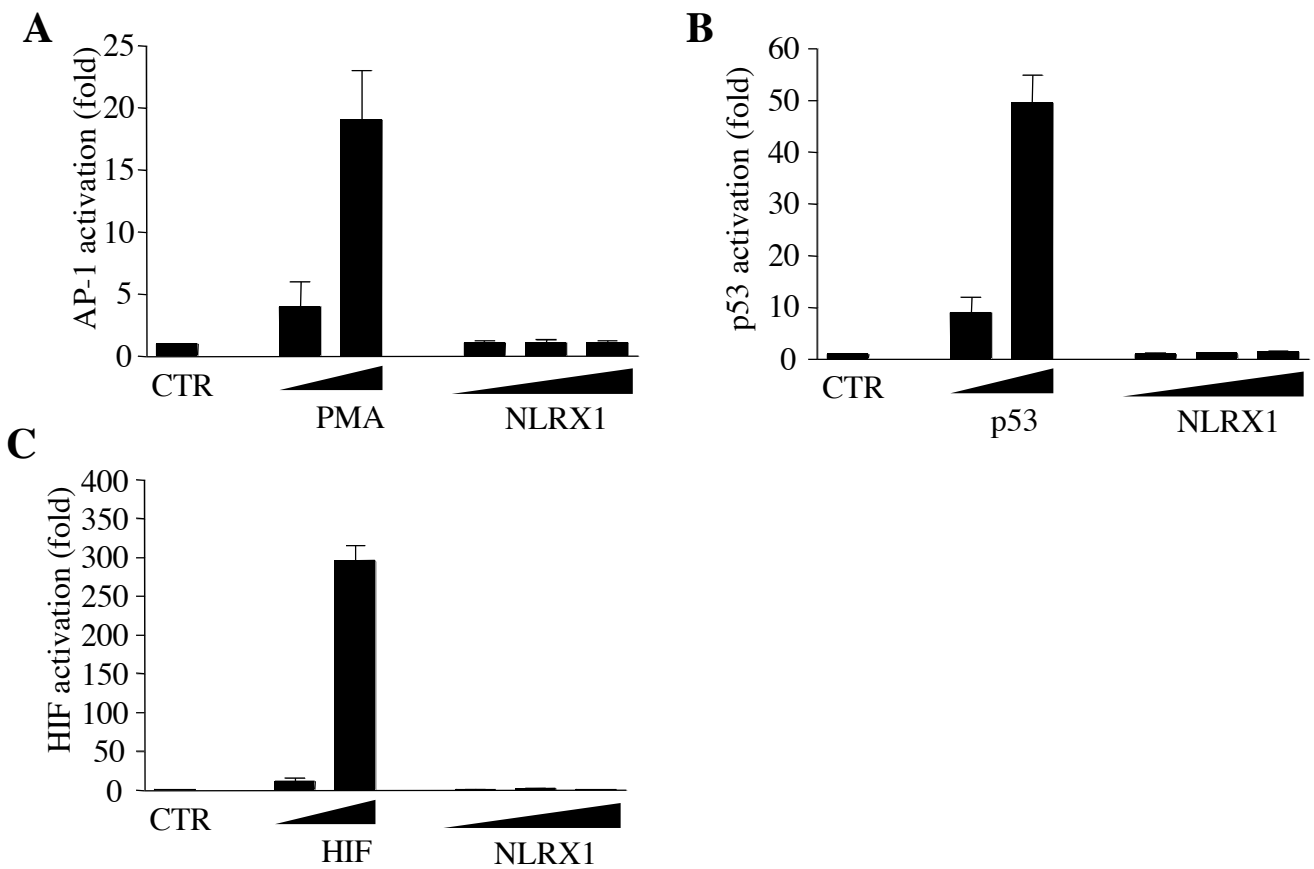
5'-GCTCCATGGCTTAGAGCATC-3' (forward)

5'-AACTCCTCCTCCGTCCTGAT-3' (reverse)

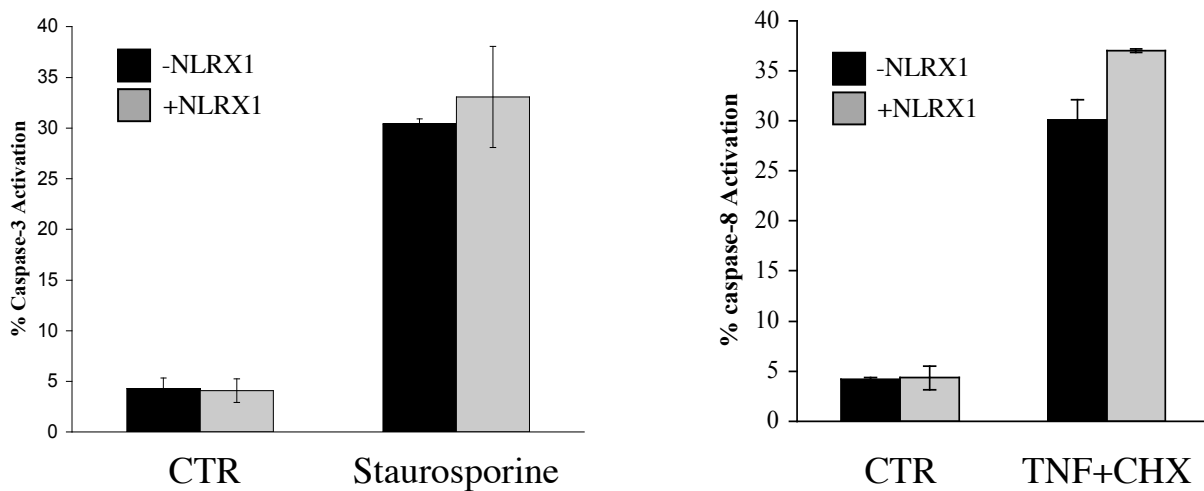
β-actin

5'-GTGGGGCGCCCCAGGCACCA-3' (forward)

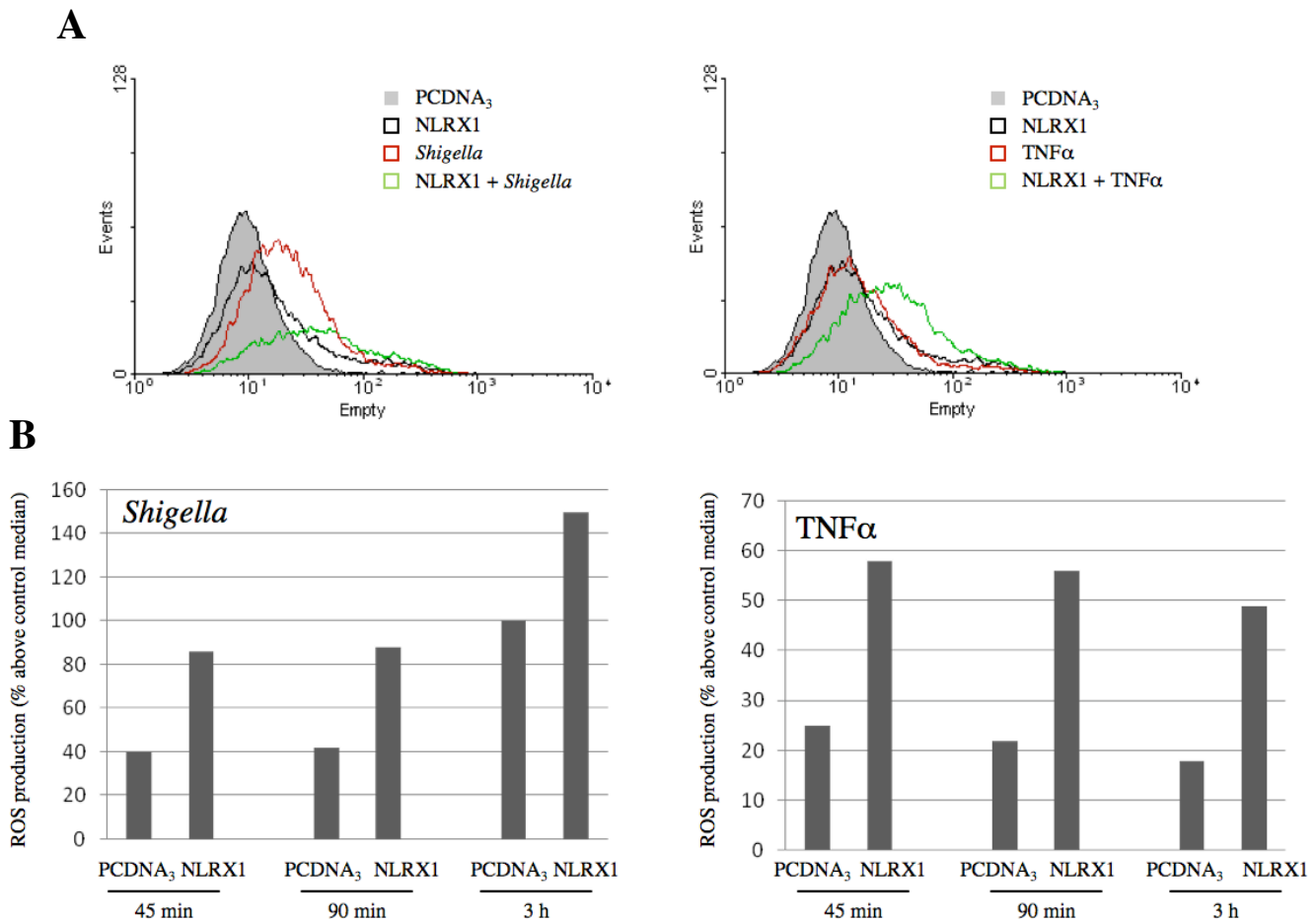
5'-CTCCTTAATGTCACGCACGATTTC-3' (reverse)



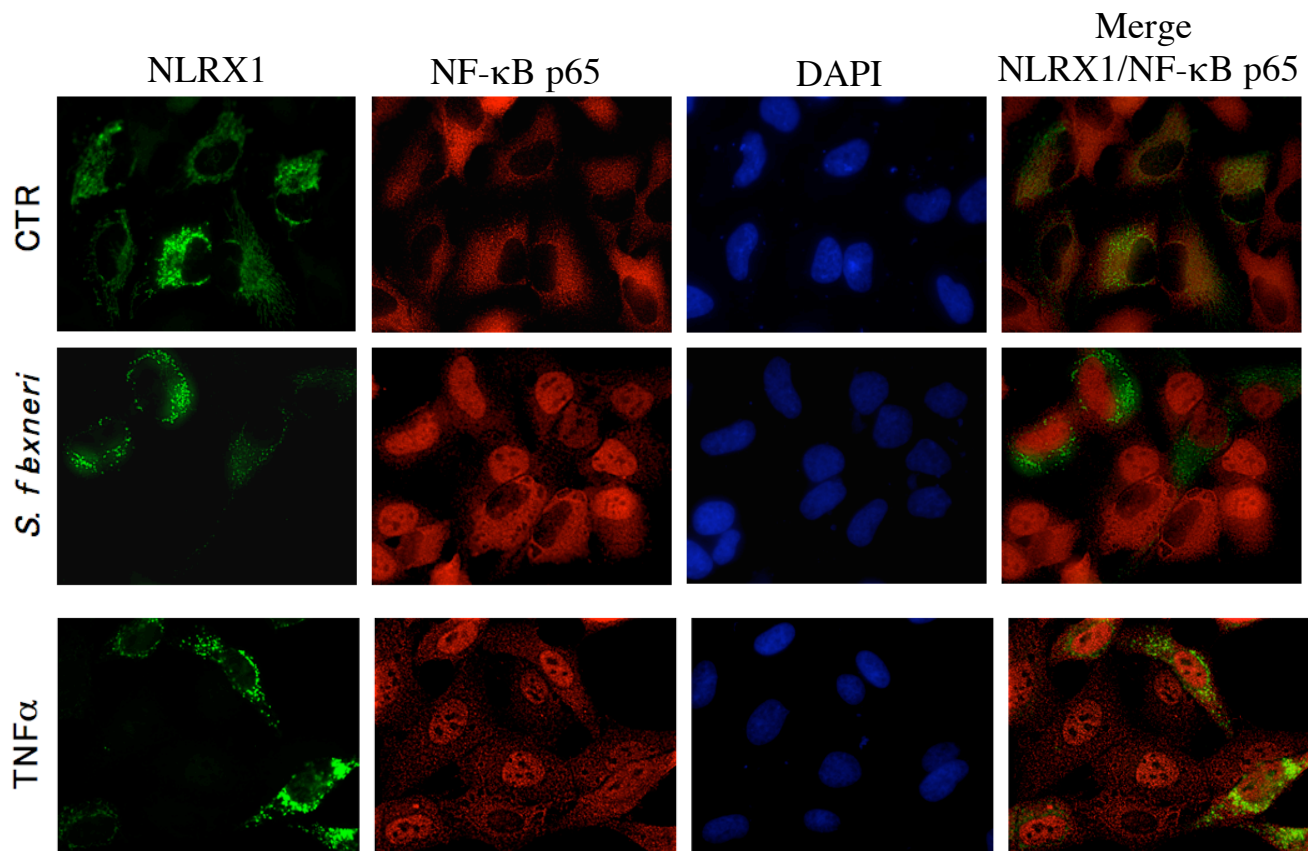
Supplementary Figure 2: NLRX1 overexpression does not trigger AP-1-, p53- or HIF-dependent pathways. HEK293T epithelial cells were transfected with increasing amounts (10, 100 and 250 ng) of NLRX1 expression vector together with AP-1- (A), p53- (B) and hypoxia inducible factor- (HIF) (C) luciferase-reporter constructs. Different positive controls were used, depending of the luciferase-reporter construct used: PMA (A; 10 and 100ng/ml) or p53 (B) and HIF-1 α (C) expression vectors (transfection of 20 or 200 ng). Data show the mean \pm s.e.m of duplicates and is representative of three independent experiments. CTR, control.



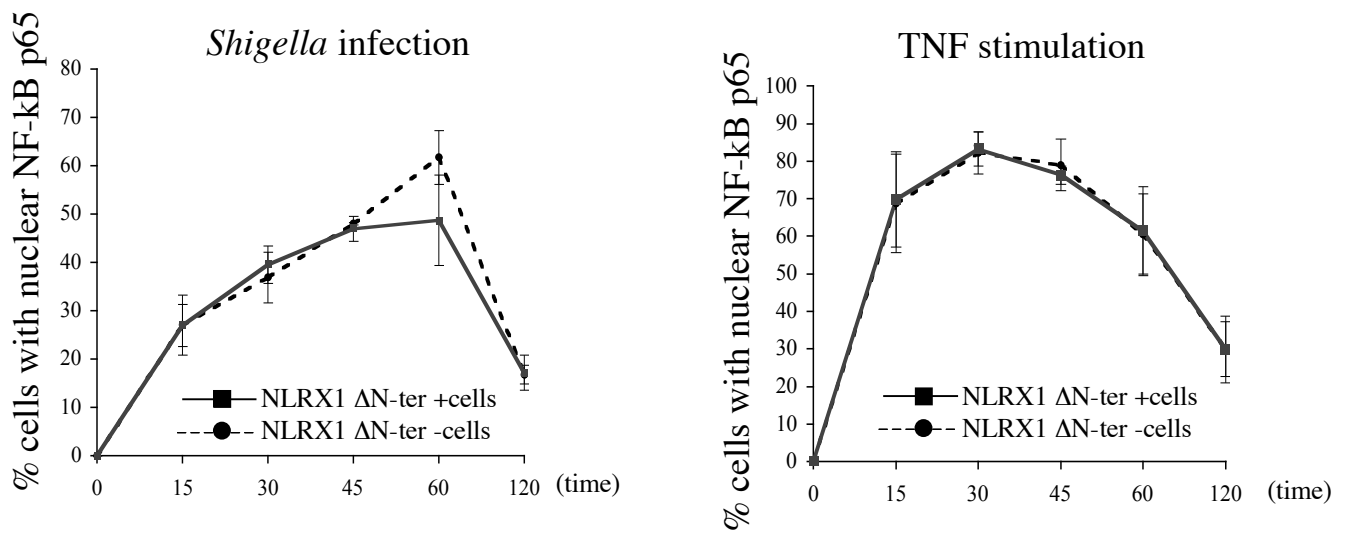
Supplementary Figure 3: NLRX1 overexpression does not significantly alter apoptosis. HeLa cells were transfected overnight with NLRX1 and stimulated for 2 hours with either 2 μ M staurosporine (left panel) or TNF (10 ng/ml) plus cycloheximide (CHX; 0,5 μ g/ml) (right panel). Activation of caspase-3 and caspase-8 were quantified by immunofluorescence using antibodies that detect the cleaved caspase-3 and cleaved caspase-8 in cells over-expressing or not NLRX1. The expression of NLRX1 was determined using an antibody against the FLAG epitope. For each experiment, a minimum of 200 cells were quantified, and the results presented are representative of three independent experiments.



Supplementary Figure 4: Kinetics of reactive oxygen species production following *Shigella* infection or TNF α stimulation for up to 3h in cells over-expressing NLRX1. HeLa cells were transfected overnight with pcDNA3 or NLRX1 vectors and infected for 3 hours with *Shigella* (left panel) or stimulated for 3 hours with 10 ng/ml TNF α (right panel). ROS production was measured using a redox-sensitive dye (CM-H₂DCFDA) on live cells, followed by flow cytometry analysis. (B) Time-course analysis of ROS production induced by *Shigella* (left panel) and TNF α (right panel) in cells transfected with pcDNA3 or NLRX1, as in (A). The results presented are representative of three independent experiments.



Supplementary Figure 5: HeLa cells grown on glass coverslips were transfected overnight with NLRX1 expression vector and infected with *Shigella* or stimulated with 10 ng/ml TNF α for 1 hour. NLRX1 over-expressing cells were stained using a monoclonal anti-Flag antibody, and a polyclonal anti-NF- κ B p65 antibody was used to assess the cellular localization of this NF- κ B subunit. Cells in which the NF- κ B is activated display nuclear localization of NF- κ B p65. DAPI was used to stain nuclei. Such experimental set-up was used to perform quantification analyses presented in Figure 4C-D. Note that for quantification purposes, fields were picked randomly and > 500 cells (from 3 independent experiments) per condition/time point were analyzed for NLRX1 over-expression and NF- κ B p65 nuclear translocation.



Supplementary Figure 6: NLRX1 localization to the mitochondria is critical for the modulation of *Shigella*- and TNF-dependent NF- κ B activation. HeLa cells grown on glass coverslips were transfected overnight with NLRX1 Δ N-ter expression vector and infected with *Shigella* (left) or stimulated with 10 ng/ml TNF α (right) for various times, as indicated. The nuclear translocation of NF- κ B p65 subunit (as an indicator of the activation of the NF- κ B pathway) was evaluated by immunofluorescence in cells over-expressing NLRX1 Δ N-ter (NLRX1 Δ N-ter +cells) or not (NLRX1 Δ N-ter -cells). Data show the mean \pm s.e.m of three independent experiments, and for each condition and time point, a minimum of 500 cells were counted.