

Supplementary figures:

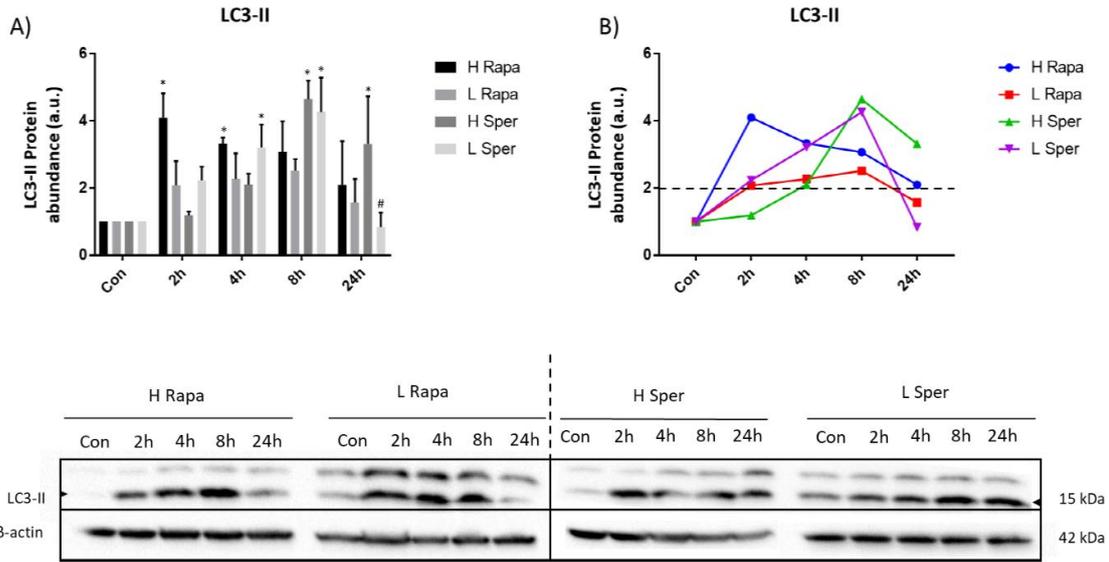


Figure S1: Western blot analyses of LC3-II abundance levels over 24 hours: Representative immunoblots are shown, indicating the relative abundance levels of LC3-II at 2, 4, 8 and 24 hours post-treatment using 1 μ M Rapamycin (H Rapa), 10 nM Rapamycin (L Rapa), 20 μ M Spermidine (H Sper) and 5 μ M Spermidine (L Sper). **A)** Bar graphs and **B)** Line graphs are used to represent the data over time. N=3, * p<0.05 vs Con, # p<0.05 vs H Sper 24h.

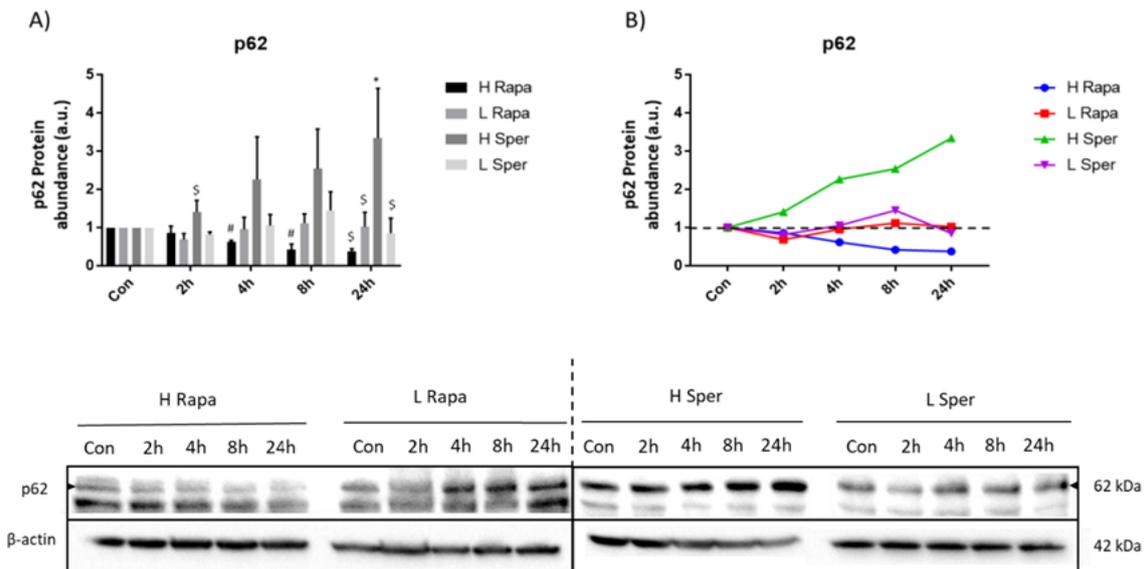


Figure S2: Western blot analysis of relative p62 abundance levels over 24 hours. Representative immunoblots are shown, indicating the relative abundance levels of p62 at 2, 4, 8 and 24 hours post-treatment using 1 μ M Rapamycin (H Rapa), 10 nM Rapamycin (L Rapa), 20 μ M Spermidine (H Sper) and 5 μ M Spermidine (L Sper). **A)** Bar graphs and **B)** Line graphs are used to represent the data over time. N=3, * p<0.05 vs Con, # p<0.05 vs corresponding H Sper group at the same time points. \$p<0.05 vs H Sper 24 hours.

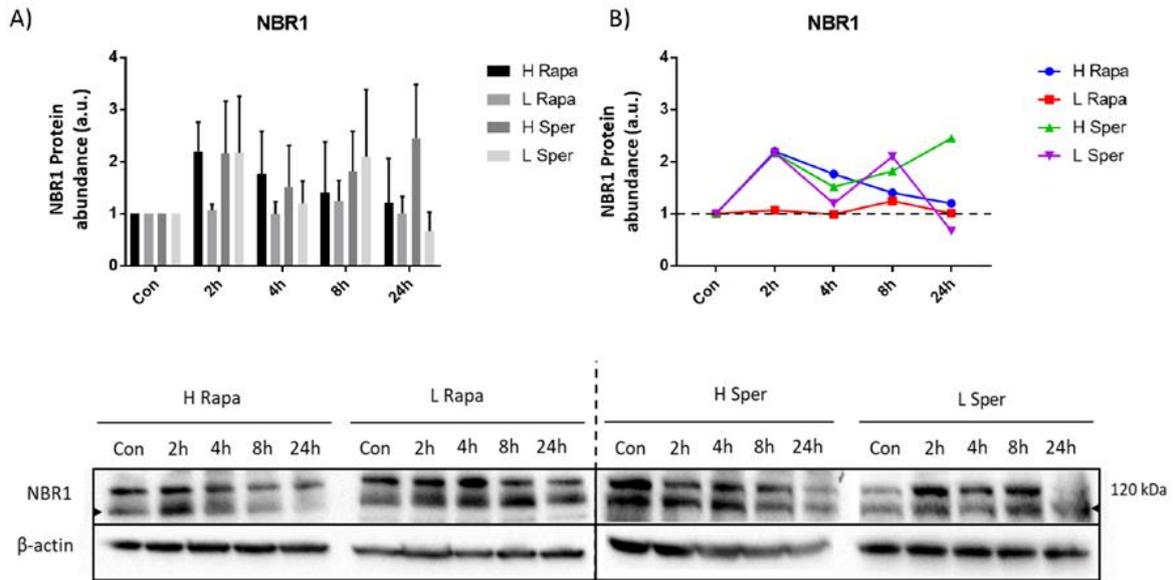


Figure S3: Western blot analysis of relative NBR1 abundance levels over 24 hours. Representative immunoblots are shown, indicating the relative abundance levels of NBR1 at 2, 4, 8 and 24 hours post-treatment using 1 μ M Rapamycin (H Rapa), 10 nM Rapamycin (L Rapa), 20 μ M Spermidine (H Sper) and 5 μ M Spermidine (L Sper). **A)** Bar graphs and **B)** Line graphs are used to represent the data over time. N=3.

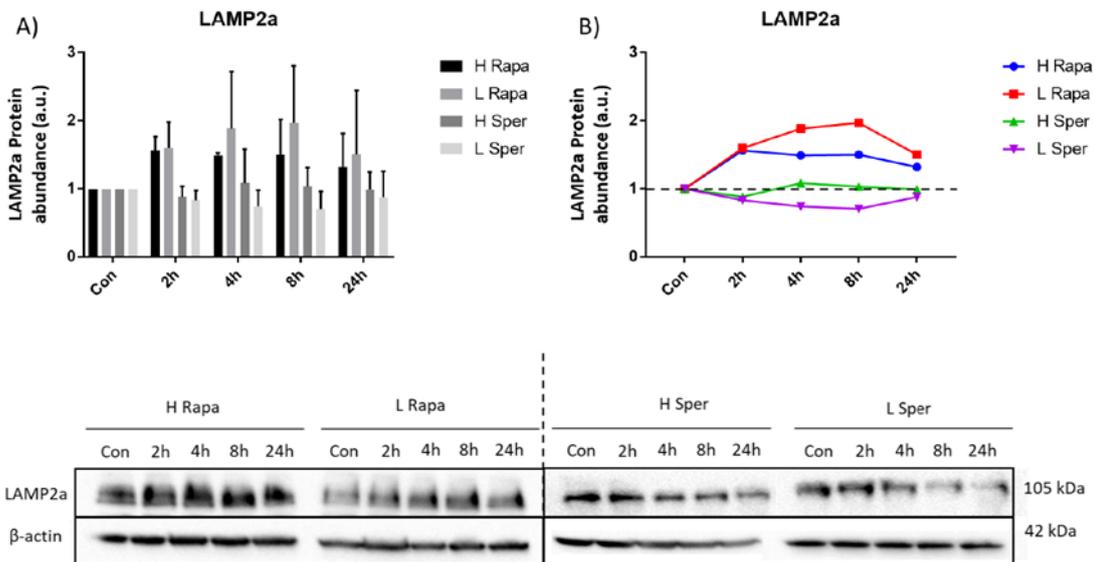


Figure S4: Western blot analysis of relative LAMP2a abundance levels over 24 hours. Representative immunoblots are shown, indicating the relative abundance levels of LAMP2a at 2, 4, 8 and 24 hours post-treatment using 1 μ M Rapamycin (H Rapa), 10 nM Rapamycin (L Rapa), 20 μ M Spermidine (H Sper) and 5 μ M Spermidine (L Sper). **A)** Bar graphs and **B)** Line graphs are used to represent the data over time. N=3.

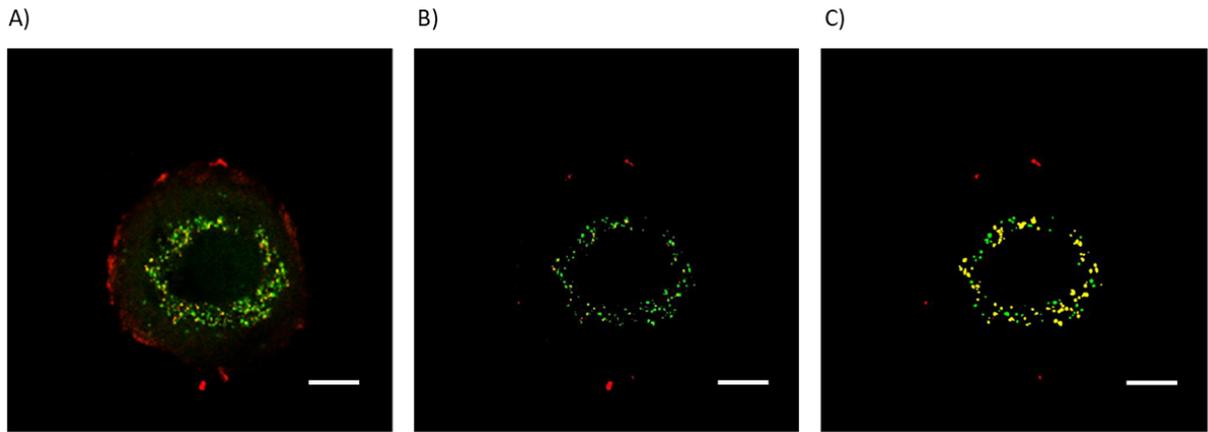


Figure S5: Representative micrographs demonstrating image processing steps. Green = GFP-LC3, red= receptor (p62), yellow= co-localised puncta. **A)** Raw image **B)** Image after adjustment **C)** Image after processing.

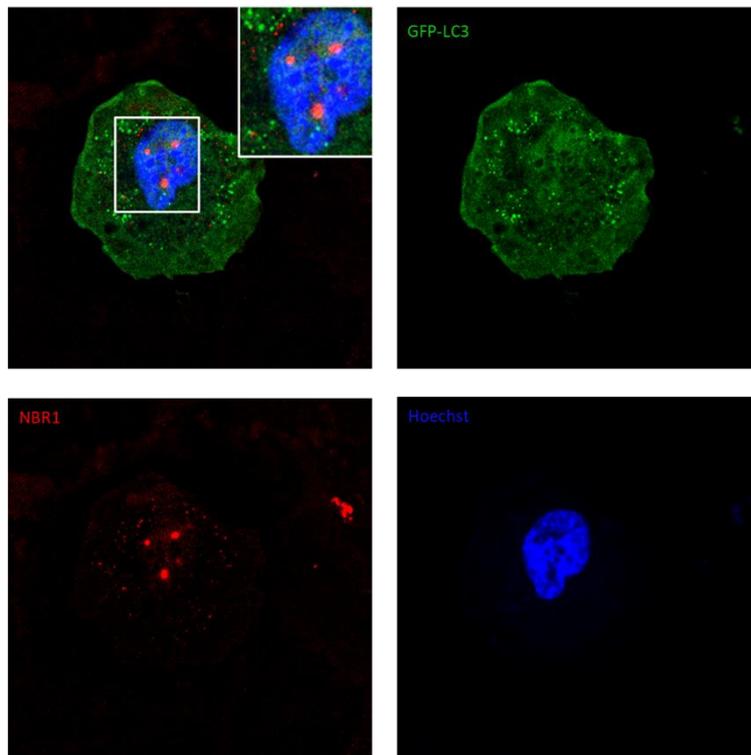


Figure S6: Representative micrograph of NBR1 positive nuclear aggregates.