Supplemental Figures – Eyer et al.

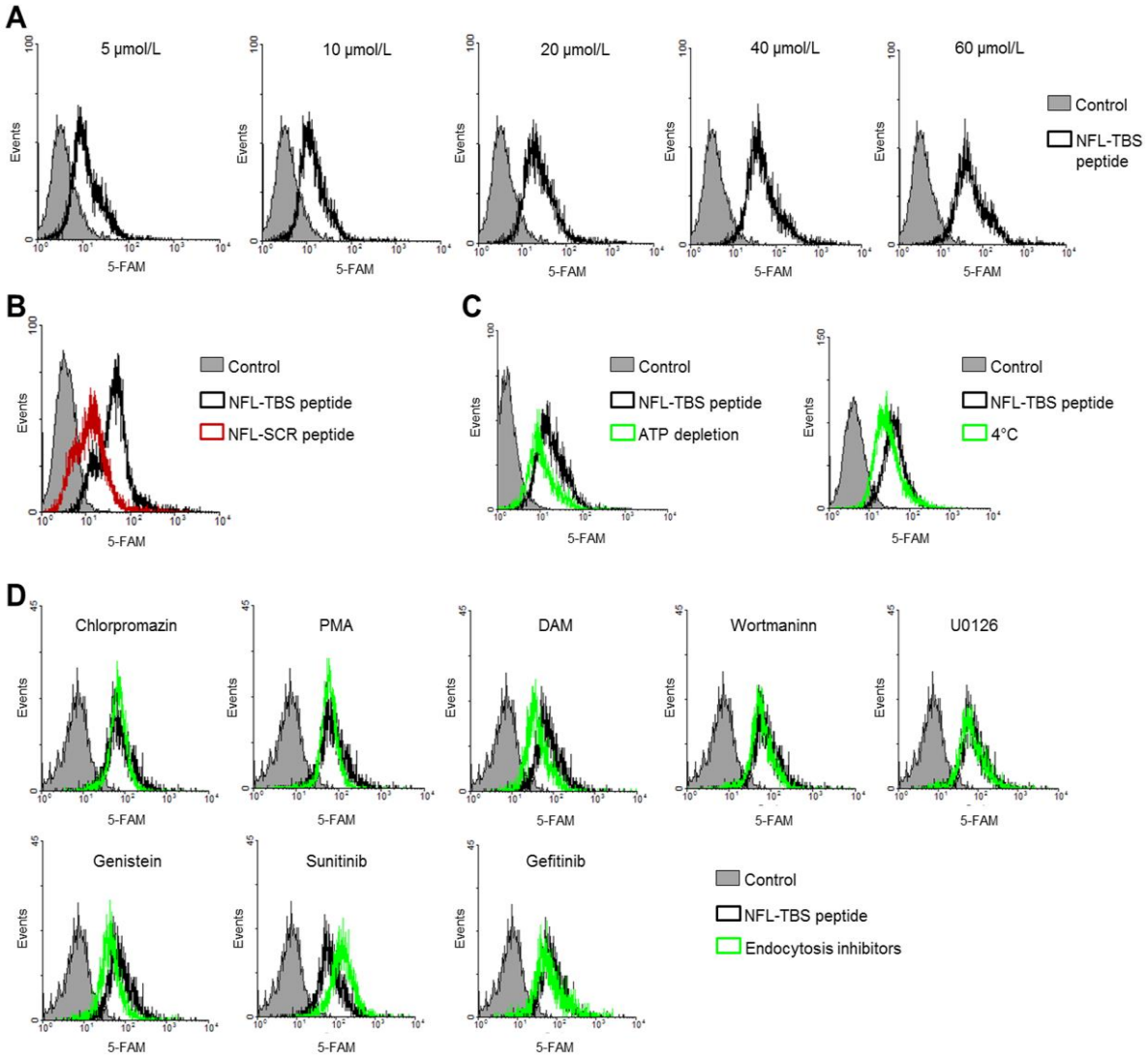

Figure S1: Flow cytometry analysis of peptide uptake. The negative control used is the unstained NSCs. The gated analyzed excluded the dead cells that are stained with propidium iodide (PI) and included more than 50 % of viable cells. **(A)** Gating schemes of each sample for the flow cytometry analysis of NFL-TBS.40-63 peptide uptake at increasing concentrations. **(B)** Gating schemes for the flow cytometry analysis of the NFL-TBS.40-63 and NFL-SCR peptide uptake. **(C)** Gating schemes of each sample for the flow cytometry analysis of the NFL-TBS.40-63 peptide uptake in an ATP-depletion buffer or at 4°C. **(D)** Gating schemes of each sample for the flow cytometry analysis of the NFL-TBS.40-63 peptide uptake in the presence of different endocytosis inhibitors.

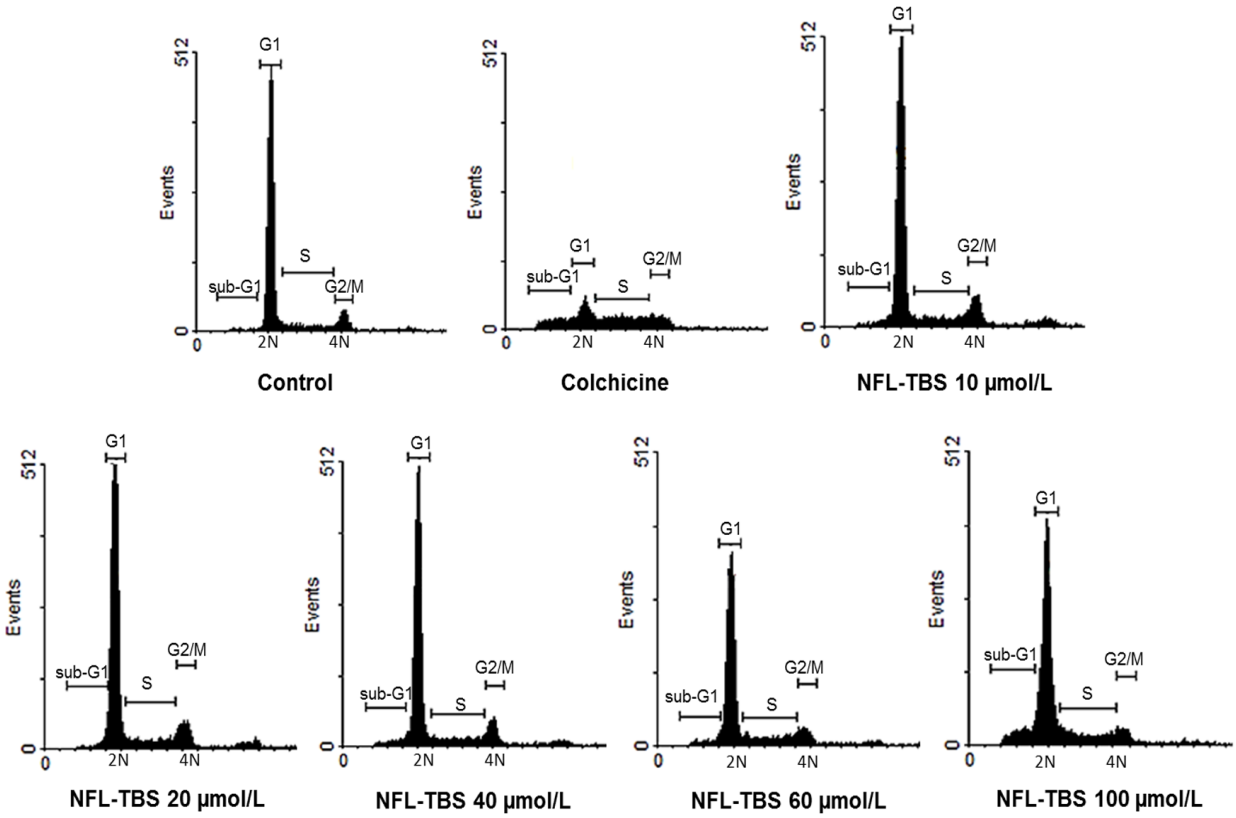

Figure S2: Flow cytometry analysis of the cell cycle. Gating schemes for the flow cytometry analysis of each sample. Cell repartition in the different phases of the cell cycle according to the DNA count. Doublet/triplet discrimination was performed to exclude false positives, before to analyze the different phases of the cell cycle.

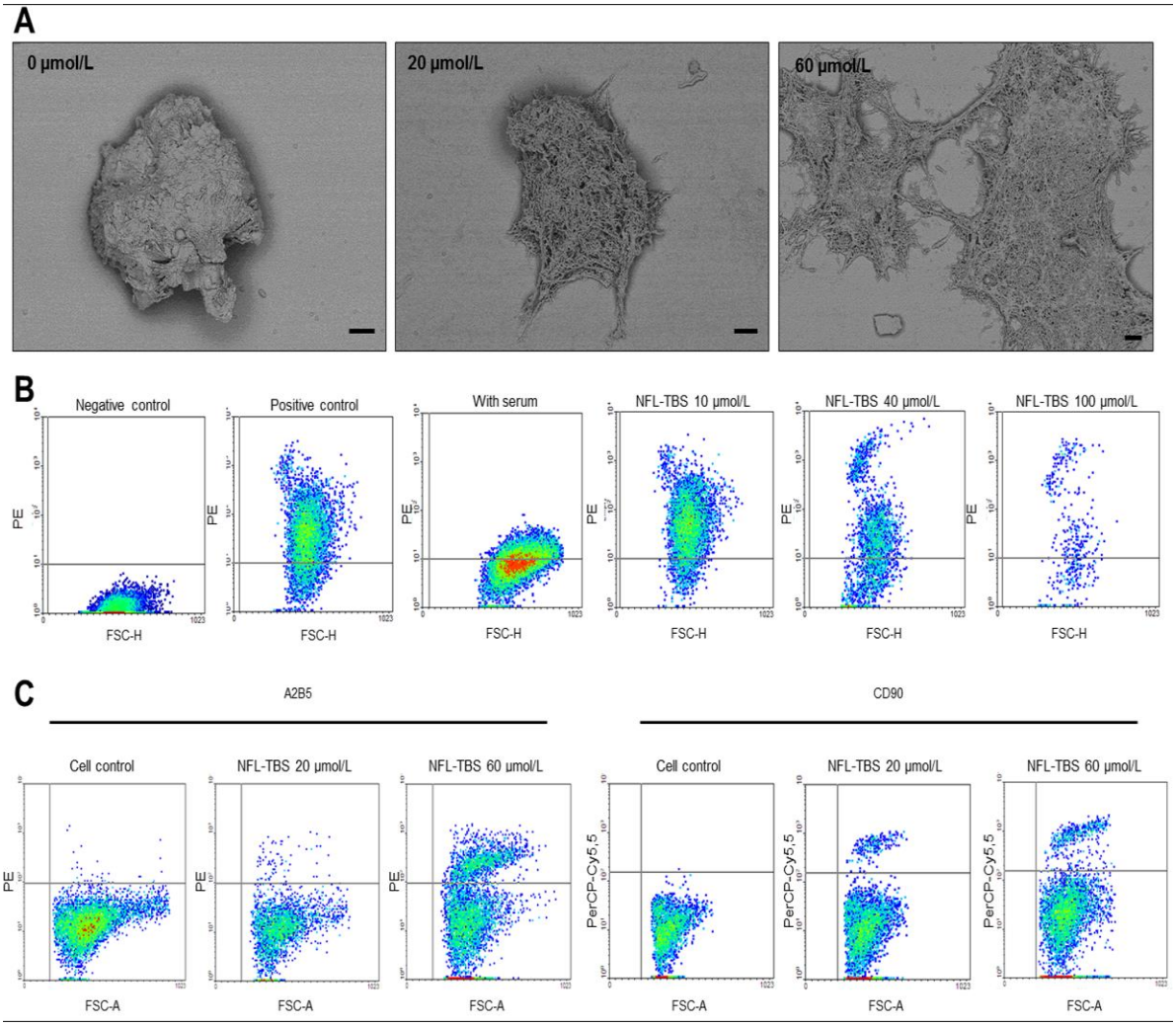

Figure S3: Scanning electron microscopy and flow cytometry analysis. (A) NSCs were treated for 7 days without or with 20 µmol/L or 60 µmol/L of NFL-TBS.40-63 peptide and examined by scanning electron microscopy. Scale bar: 10 µm. **(B)** Gating schemes for the flow cytometry analysis of the PE labeled PSA-NCAM expression in NSCs of each sample. This analysis required compensation matrix (FL2 (PE) -87% FL3; FL3 (PI) -9%FL2), and the negative control used was the unstained NSCs. The gated analyzed events excluded the dead cells stained with PI and included more than 50 % of viable cells, except at 100 µmol/L (toxic effect with less than 30 % of viable cells). **(C)** Gating schemes for the flow cytometry analysis of PE labeled A2B5 and PerCP.Cy5.5 labeled CD90 expressions in NSCs of

each sample. The negative control used was the unstained NSCs. The gated events analyzed included more than 50 % of viable cells stained with calcein-violet AM.