Supplementary files

Cathelicidins PMAP-36, LL-37 and CATH-2 are similar peptides with different modes of action

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Footnotes

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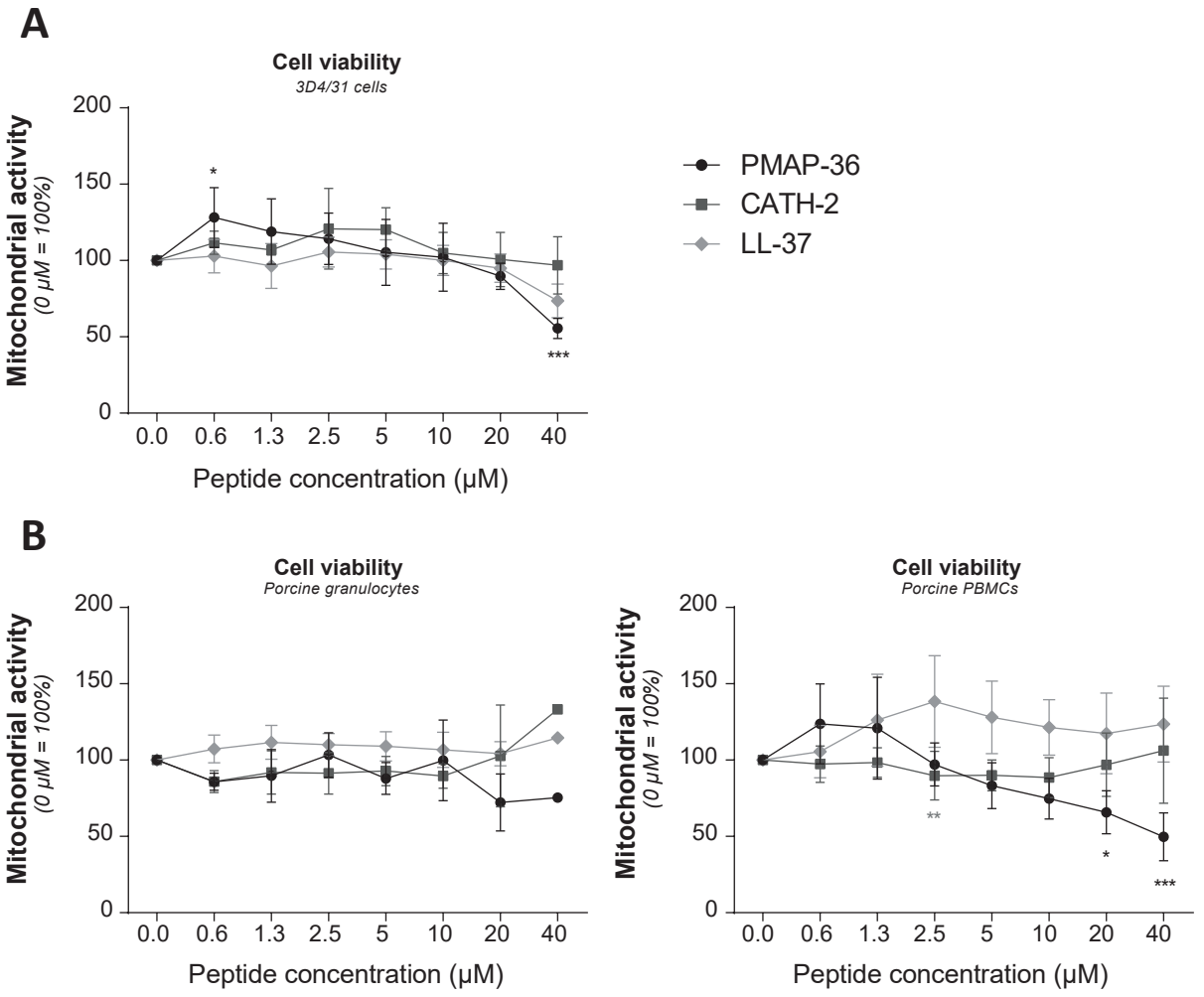
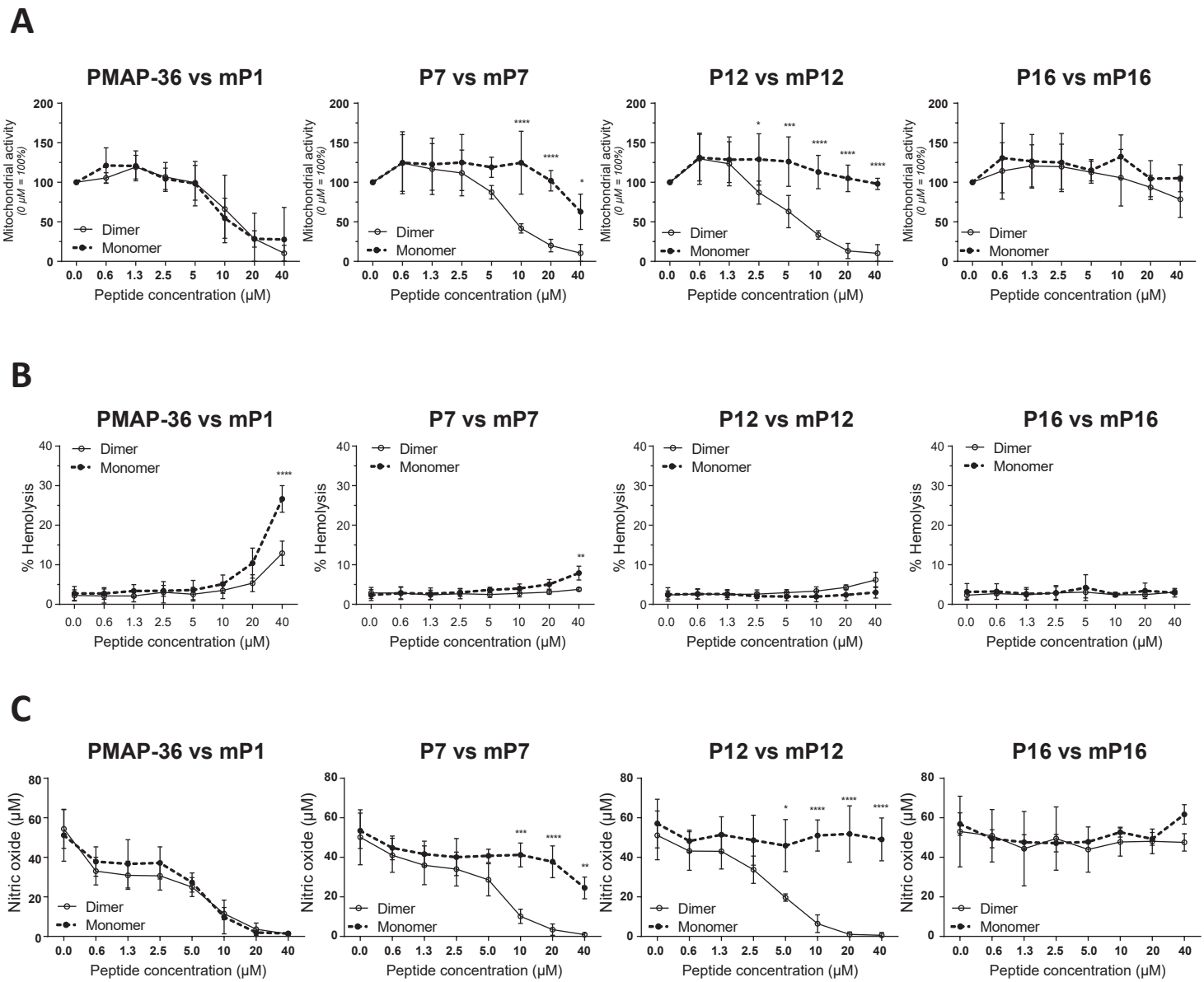


Supplementary Figure 1. Cytotoxic effect of PMAP-36, CATH-2 and LL-37 against a porcine cell line and primary cells

Cytotoxic effects against a porcine macrophage-like cell line, 3D4/31 cells, were tested using a WST-1 assay, indicating cell viability. No peptide control was set to 100% cell viability (A). Cytotoxic effects of PMAP-36, CATH-2 and LL-37 against freshly isolated primary cells. Granulocytes and PBMCs were isolated from blood, using Ficoll-Paque Plus separation and red blood cell lysis (B). Data is plotted as average +/- s.d. (3D4/31 cells N=4, granulocytes N=3, PBMCs N=6). Samples were compared to the no peptide control, using two-way ANOVA with the Bonferroni post-hoc test. (*=p≤0.05; **=p≤0.01; ***=p≤0.001;****=p≤0.0001; black - PMAP-36; dark gray – CATH-2; light gray – LL-37)



Supplementary Figure 2. Cytotoxic, hemolytic and LPS neutralizing and binding capacity of PMAP-36 monomeric analogs
Cytotoxic effects against RAW264.7 cells were tested using a WST-1 assay, indicating cell viability. No peptide control was set to 100% cell viability (A). Hemolytic effect on porcine red blood cells was determined by heme release. The positive control, 0.2% Triton was set to 100% lysis and no peptide control as background lysis (B). The PMAP-36 analogs were tested for their ability to neutralize LPS O111:B4. NO production by RAW264.7 cells is depicted (C). Data is plotted as average +/- s.d. with N=3. Results of monomeric peptides were compared to its dimeric equivalent peptides (molarity calculated for monomer peptides), using two-way ANOVA with the Bonferroni post-hoc test. (*=p≤0.05; **=p≤0.01; ***=p≤0.001;****=p≤0.0001)