# Supplementary File

# Anti-Inflammatory Effects of *N*-Acyl Homoserine Lactones Analogues on Eukaryotic Cells

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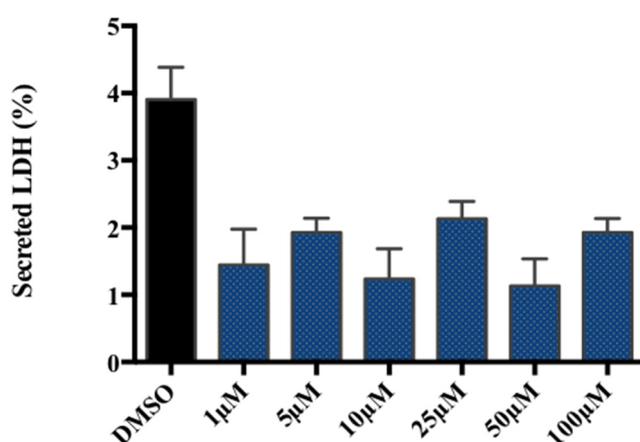
Supplementary S1: Cytotoxicity of 3-oxo-C12-HSL treatment on Caco-2/TC7 cells in stimulated state as measured by LDH release. Cells were treated with increasing doses of 3-oxo-C12-HSL combined to IL-1ß. The points are the mean value of different replicates (n ≥ 3) ± SEM. No statistical difference was observed between conditions.
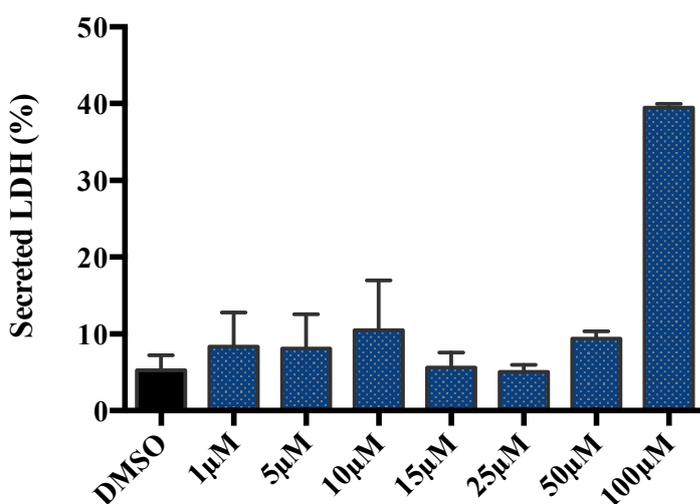


Supplementary S2: Cytotoxicity of 3-oxo-C12-HSL treatment on RAW264.7 cells in stimulated state as measured by LDH release. Cells were treated with increasing doses of 3-oxo-C12-HSL combined to LPS/TNF-α. The points are the mean value of different replicates (n = 3) ± SEM. No statistical difference was observed between conditions.
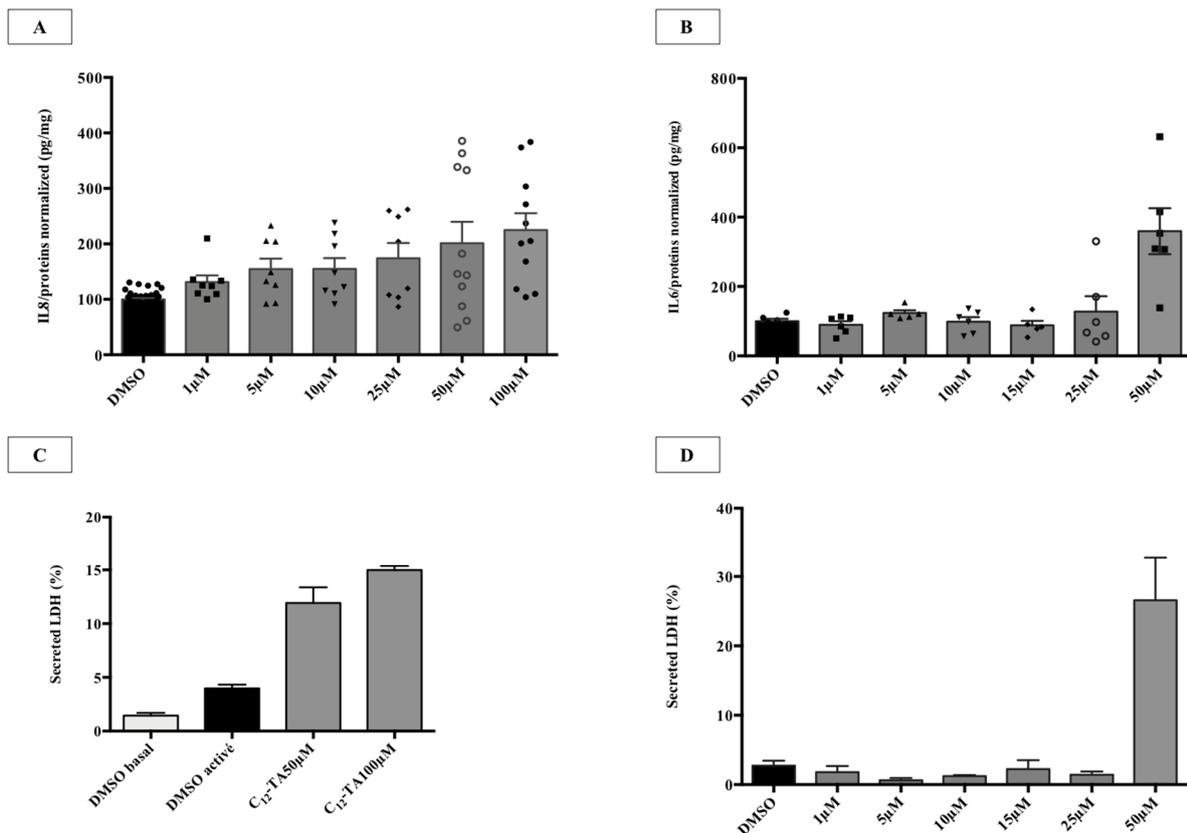
Supplementary S3: Compared biological effects of tetramic acid (3) on cell lines Caco-2/TC7 and RAW264.7. **A** (resp. **B**) : IL-8 response of Caco-2/TC7 cells (resp. IL-6 response of Raw 264.7 cells) to stimulation in presence of increasing doses of tetramic acid (3). **C** (resp. **D**): secreted LDH in Caco-2/TC7 cells (resp. RAW264.7 cells) to stimulation in presence of increasing doses of tetramic acid (3). The points are the mean value of different replicates (n $\geq$ 3) $\pm$ SEM.

**2-HQ time evolution**
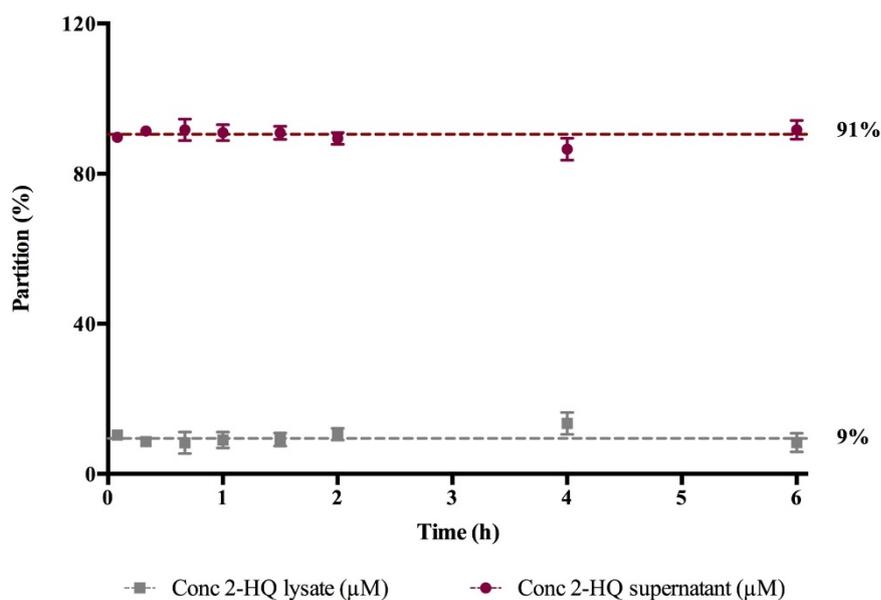


Supplementary S4: 2-HQ distribution over time
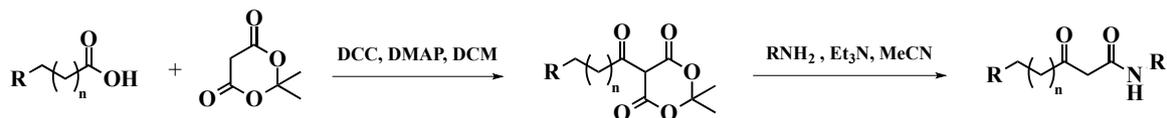
Supplementary S5: Historic AHL synthetic method.
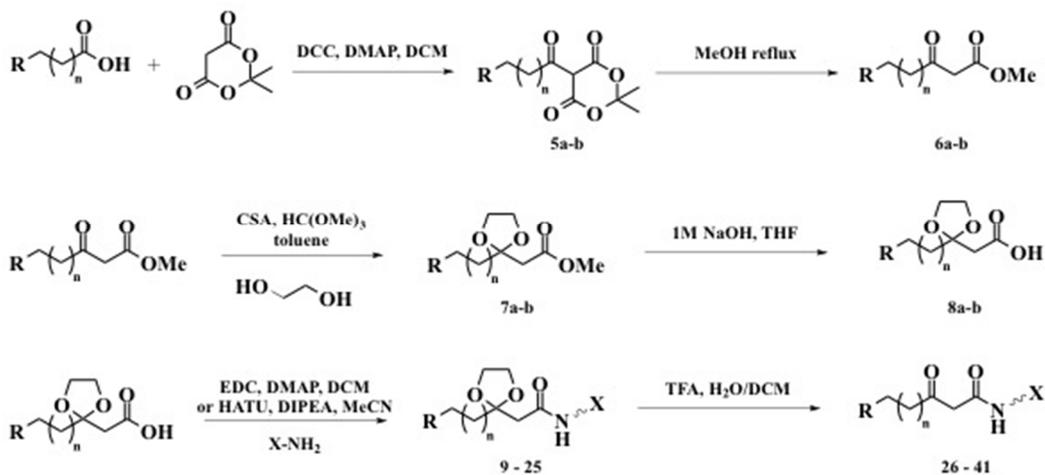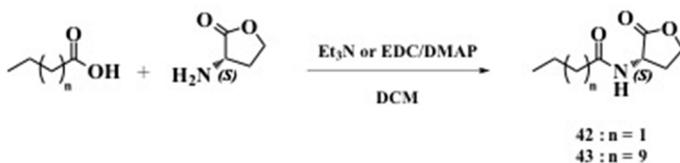


Supplementary S6: Improved total synthesis of natural AHLs and their analogues. **A**: synthetic path to access C3-keto-AHL (n = 1-7, R =CH₃ or N₃). **B**: synthetic path to access un-C3-substituted AHLs.
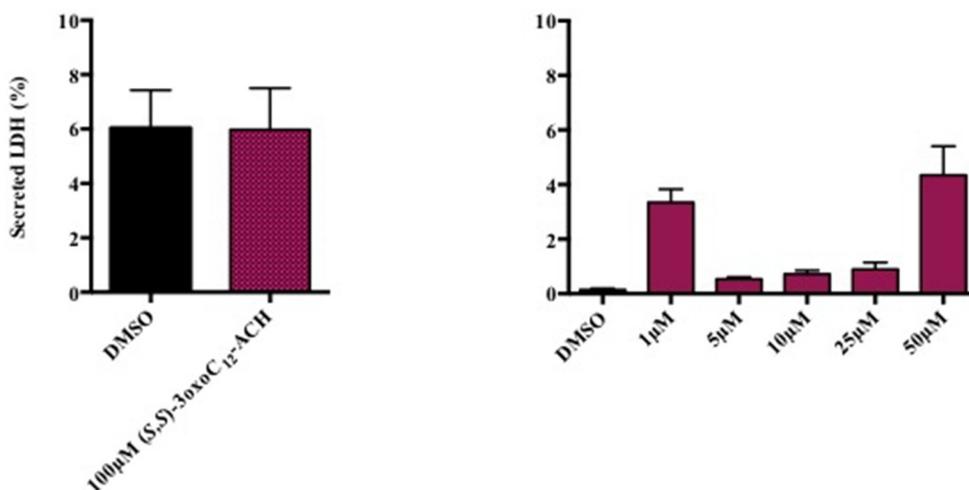


Supplementary S7: Cytotoxicity of (S,S)-3-oxo-C12-ACH treatment on Caco-2/TC7 cells (left) and RAW264.7 macrophages (right)in stimulated state as measured by LDH release. Cells were treated with increasing doses of (S,S)-3-oxo-C12-ACH. The points are the mean value of different replicates (n ≥ 3) ± SEM. No statistical difference was observed between conditions.
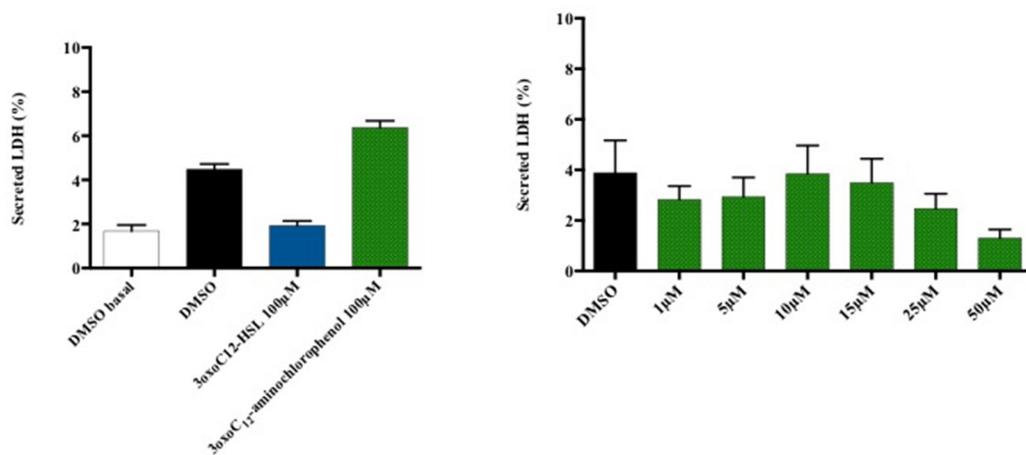
Supplementary S8: Cytotoxicity of 3-oxo-C12-2,4-aminochlorophenol treatment on Caco-2/TC7 cells (left) and RAW264.7 macrophages (right)in stimulated state as measured by LDH release. Cells were treated with increasing doses of 3-oxo-C12-2,4-aminochlorophenol. The points are the mean value of different replicates (n ≥ 3) ± SEM. No statistical difference was observed between conditions.