

Phytotitre natural product extract library screen

Sample data from screen for inhibitors of proliferation of *Staphylococcus aureus*

Data terms of use:

- These data are provided for research purposes only
- No health benefits of any screened extracts are claimed or implied
- The *Phytotitre* library is provided for *in vitro* research only

Experimental procedure:

- An overnight culture of *Staphylococcus aureus* (*S. aureus*) was grown to plateau phase
- An aliquot of the overnight culture was diluted 1:200 in sterile Luria broth (LB)
- 1.5 µl of each extract from the *Phytotitre* library, or DMSO as vehicle control, were pipetted into individual wells of a sterile 96-well microplate
- All wells in the first column received DMSO control, columns 2-11 received extracts, and column 12 received bacteria only without DMSO or extracts
- 148.5 µl of 1:200 diluted *S. aureus* culture was added to each well
- Identical triplicates of each plate were prepared
- Absorbance was measured at 595 nm using a microplate reader immediately after plating to enable background correction for absorbance related to pigments in extracts
- Plates were transferred to a shaking incubator at 37°C
- Absorbance at 595 nm was measured at 8 h and 21 h after start of incubation

Notes:

- Bacterial growth is proportional to absorbance measured at 595 nm
- Extracts were tested at 1:100 dilution to minimise excessive occurrence of hits
- Results were background corrected by subtracting the absorbance of each individual well measured at t=0 to account for the effects of pigments present in extracts
- In the following charts, dark green bars represent 1% DMSO control cultures (8 per plate), blue bars are cultures with 1% plant extracts, light green bars are cultures with no DMSO or extract (8 per plate), red bars are those which showed >30% reduction in bacterial growth compared to mean of DMSO control cultures
- Error bars represent standard deviation (SD) of cultures in three independent plates
- The numbers below each chart indicate the extract reference IDs (001 - 800)
- Results are expressed as % growth compared to mean of DMSO controls







