Phytotitre natural product extract library screen

Sample data from screen for inhibitors of proliferation of human tumour cell-lines

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:

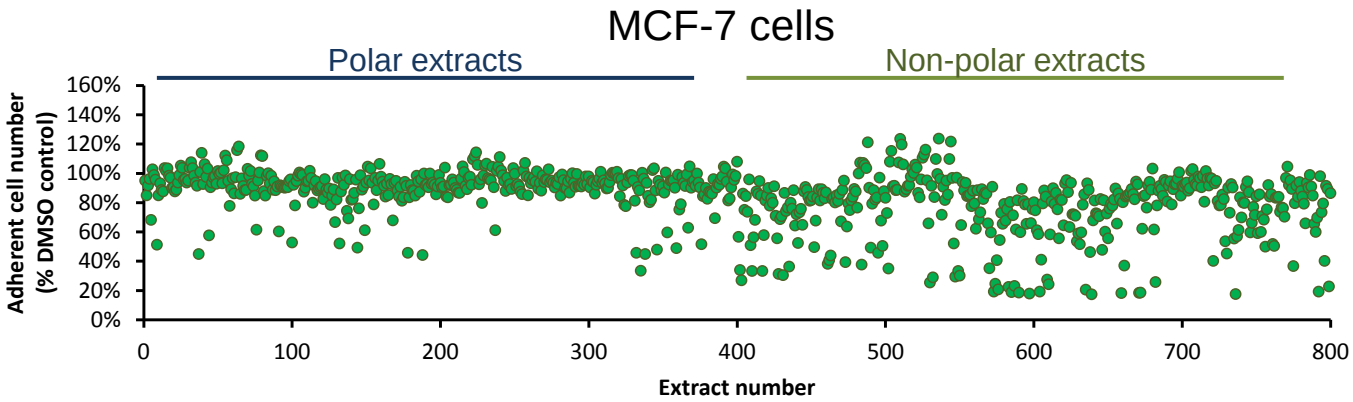
- The human tumour cell lines HepG2 (hepatocyte cancer line), MCF-7 (breast cancer line), PC3 (prostate cancer line) and A2780 (ovarian cancer line) were plated at $1x10^4$ cells per well in 96-well microplates
- 24 h later, cells were ~20-30% confluent
- Cells were then challenged with 1% DMSO (vehicle only control, 8 wells per plate), or 1% of each plant extract in tissue culture medium
- After a further 24 h, adherent cell number was assessed by crystal violet assay (Feoktistova M, Geserik P, Leverkus M. Crystal violet assay for determining viability of cultured cells. Cold Spring Harb Protoc, 2016)
- Absorbance of retained dye, which is proportional to cell number, was measured at 595 nm and normalised to percentage of DMSO control wells per plate

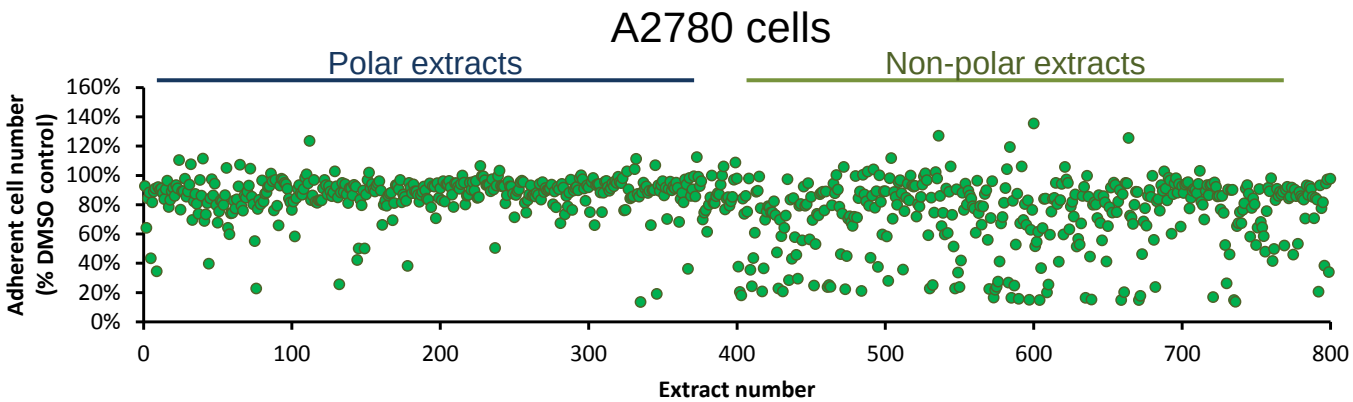
Notes:

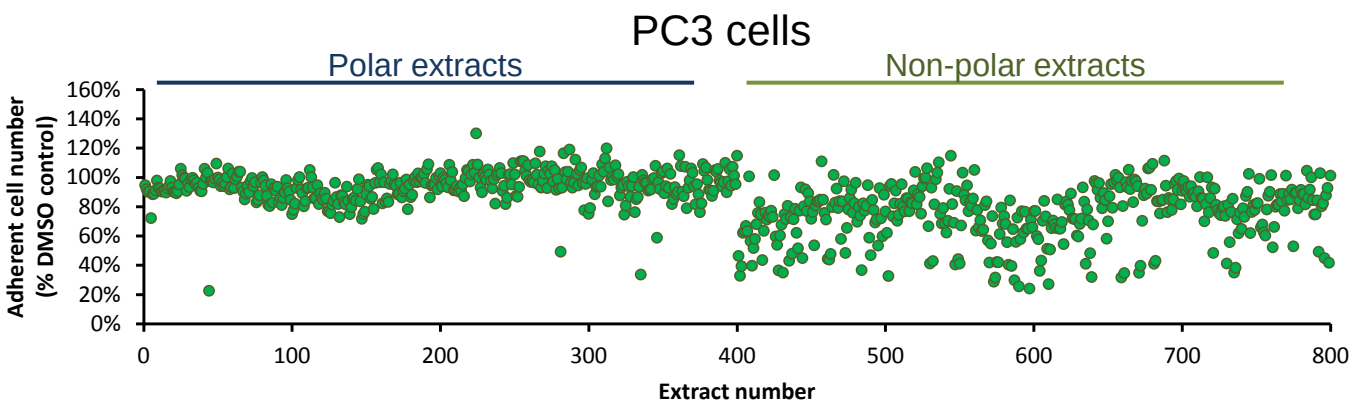
- The crystal violet assay is a convenient method for measurement of proliferation in this application since the washing step avoids issues with pigments present in extracts which may affect absorbance
- Results are presented as percentage of adherent cell number of individual wells relative to vehicle only control
- Each value represents a single point determination
- The numbers below each chart indicate the extract reference IDs (001 - 800)
- Results are expressed as % cell number, as measured by crystal violet assay, compared to the mean of 8 DMSO controls measured on each independent plate
- Correlation analyses were performed to identify extracts with potential to inhibit proliferation of one type of transformed cell without affecting the growth of others

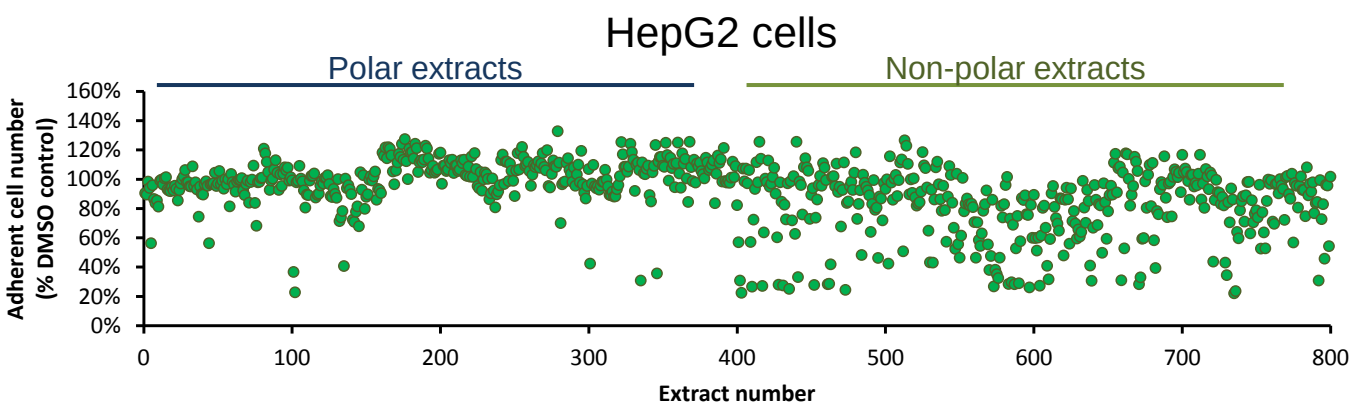
Caithness Biotechnologies Ltd., 72 Boston Road, Leicester, UK, LE4 1HB.
Tel: +44 (116) 326 3802| Company: 9395037 | VAT : 202 4512 64
contact@caithnessbiotechnologies.com | www.caithnessbiotechnologies.com

Screen of the *Phytotitre* library for inhibitors of proliferation of human tumour cell-lines



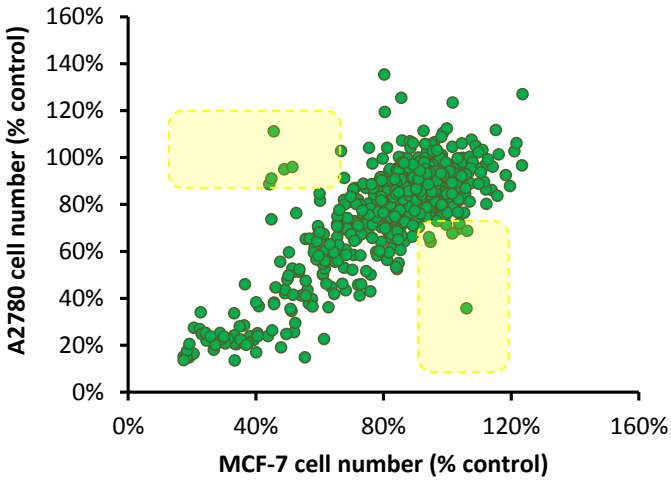




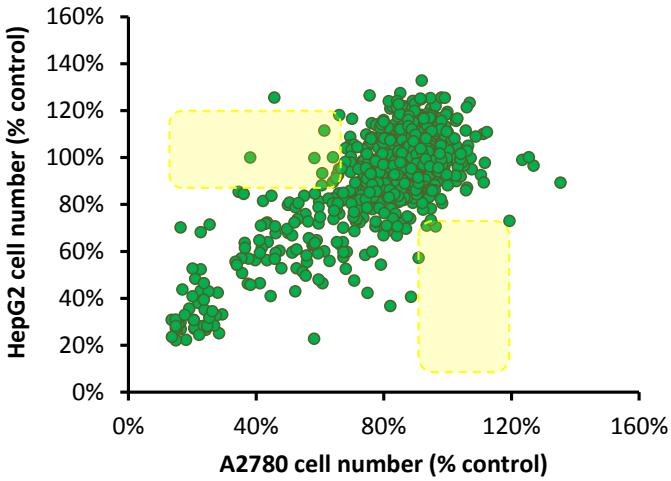


Correlation analyses to identify plant extracts with potential to inhibit growth of specific tumour cell-lines

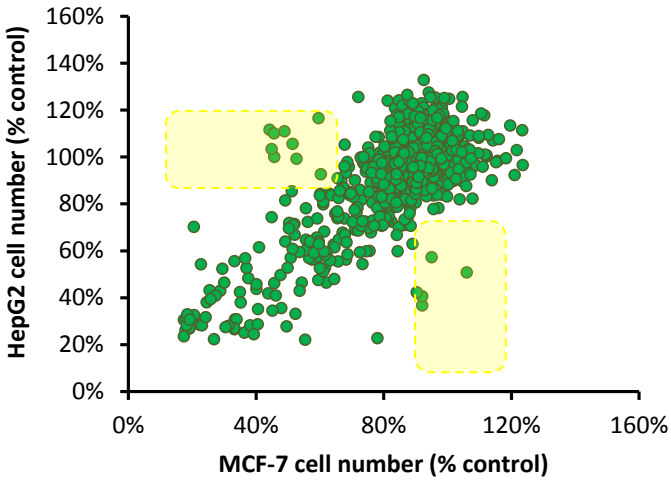
A2780 vs MCF-7



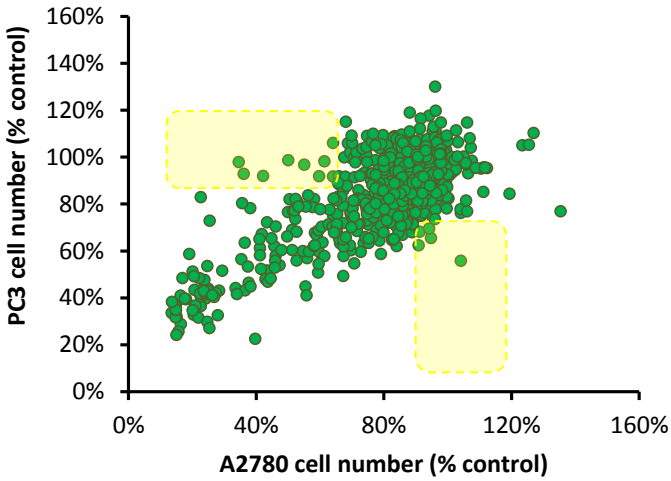
HepG2 vs A2780



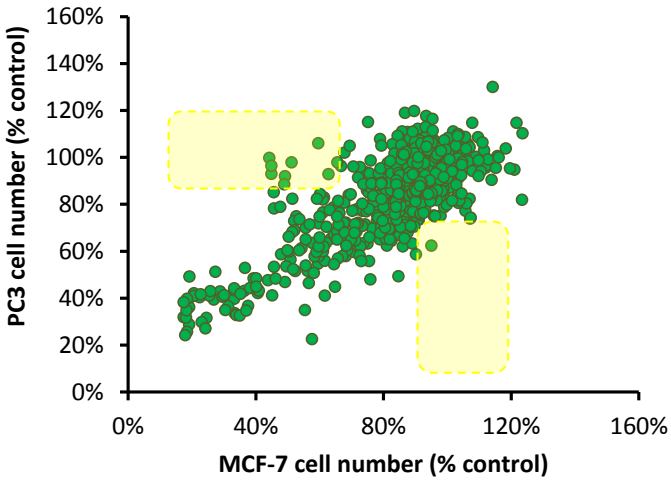
HepG2 vs MCF-7



PC3 vs A2780



PC3 vs MCF-7



PC3 vs HepG2