

## Identifying inhibitors of the *Leishmania* inositol phosphorylceramide synthase with antiprotozoal activity using a yeast-based assay and ultra-high throughput screening platform

Jennifer L. Norcliffe, John G. Mina, Emilio Alvarez, Juan Cantizani, Francisco de Dios-Anton, Gonzalo Colmenarejo, Silva Gonzalez-Del Valle, Maria Marco, José M. Fiandor, Julio J. Martin, P.G. Steel and P.W. Denny

### Supplementary Information

#### SI Table 1

Data from analyses of the clustered 211 hits. Structure – chemical structure (where available); Cmpd Number – compound reference number; PFI - Property Forecast Index; A'ring – number of aromatics ring; pIC50 LmjIPCS –  $-\log_{10}IC_{50}$  mol against  $\alpha ade^{-}.lys^{-}.leu^{-}.\Delta aur1^{-}.$ pESC-LEU\_LmjIPCS; pIC50 AUR1 –  $-\log_{10}IC_{50}$  mol against  $\alpha ade^{-}.lys^{-}.leu^{-}.\Delta aur1^{-}.$ pESC-LEU\_AUR1; pIC50 axenic –  $-\log_{10}IC_{50}$  mol against *L. donovani* (MHOM/SD/62/1S-CL2D, LdBOB) axenic amastigotes; pIC50 axenic  $\geq 5$  **TRUE** or **FALSE**; pIC50 HepG2 –  $-\log_{10}IC_{50}$  mol against HepG2 cells; pSI v HepG2 – logSI (Selectivity Index) of compounds for axenic amastigotes over HepG2 cells; pSI v HepG2  $\geq 1$ , PFI  $\leq 8$ , A'ring  $\leq 4$  **TRUE** or **FALSE**; pIC50 InMac –  $-\log_{10}IC_{50}$  mol against intramacrophage *L. donovani*; pIC50 THP-1 –  $-\log_{10}IC_{50}$  mol against THP-1 macrophages; pSI v THP-1 - logSI (Selectivity Index) of compounds for axenic amastigotes over THP-1 macrophages; InMac  $\geq 5$ , pSI v THP1  $\geq 1$  **TRUE** or **FALSE**; Hit Ref – Hit reference number in article

pIC50 of 4 (4.3 for iMac and THP-1 assay) are the minimum values obtainable from the assays, therefore actual pSI values could be higher.

### SI Figure 1

The activity of compound **1** against wild type *Leishmania major* (red;  $-\log IC_{50}$  mol [pIC<sub>50</sub>] 5.5; 95% CI: 5.9-5.0) and the mutant,  $\Delta lcb2$  (blue; pIC<sub>50</sub> 5.5; 95% CI: 5.7-5.2). Values are from 3 independent experiments.

