TOXICITY TEST
LEVAMISOLE TREATMENT IN 6WELL MICROPLATE NGM

Phylum TECH | Drug Discovery Solutions

What you need:

6 well plate with lid (GBO #657-160).

NGM.

M9 buffer.

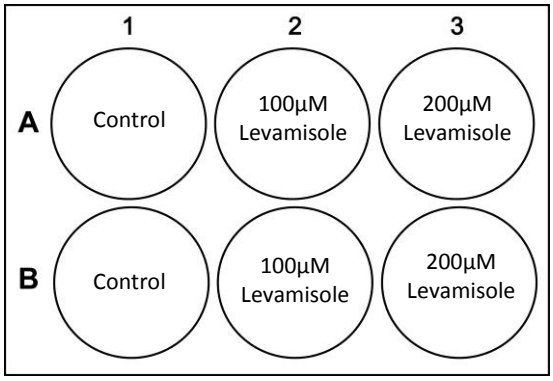
Levamisole (VETRANAL™ #31742) – Stock solution: 100mM in ddH20.

Synchronized populations of young adult worms.

wMicrotracker Arena equipment.

Microplate preparation:

- NGM was prepared following standard procedure. Levamisole is added to the 55°C NGM agar solution immediately after the addition of the salts and cholesterol, and then dispensed to 6 well microplate (3.5ml per well). Levamisole plates were not seeded with OP50 and are stored at 4°C. These drug plates are used within two weeks because the drugs' efficacy decreases over time.
- The assay is performed on plates that had been allowed to warm to room temperature prior to the start of the experiment.

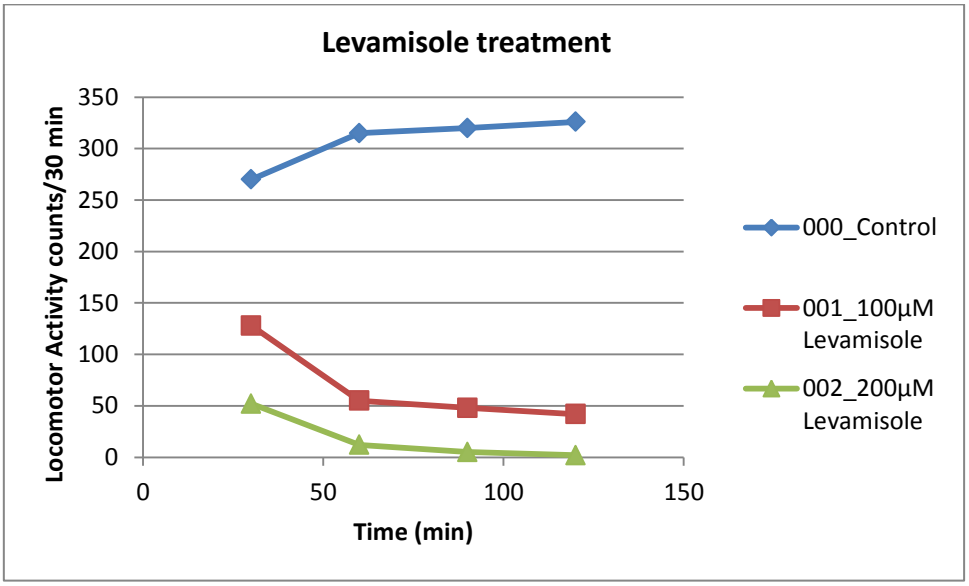


Procedure:

- *35 C.elegans,* young adult N2 strain, were transferred to each well of a microplate 6-well format containing NGM+Levamisole. Technical duplicates were employed.
- Locomotor activity of worms was recorded using WMicrotracker ARENA system for 2 hours, at 23ºC.
- Acquired data was analyzed using MSExcel.

Expected Results:

A comparison of treatments shows a dose response effect with Levamisole.



35 young adult N2 per well. 2 well per condition: Control; 100µm Levamisole, 200µm Levamisole. Data acquired with the Arena (Phylumtech R&D, 05/23/2019) at 23ºC.