

# Natural Product Compound Set

Product code: NP002

## Contents:

- 22 x 96-well microtitre plates (Greiner cat. 650101; solid black) containing 1,844 purified natural product compounds
- 1 x SDF file (NP002.sdf) containing numbers, names, locations and structures of compounds
- 1 x Excel file (NP002.xls) containing numbers, names and locations of compounds and plate layouts

## Description

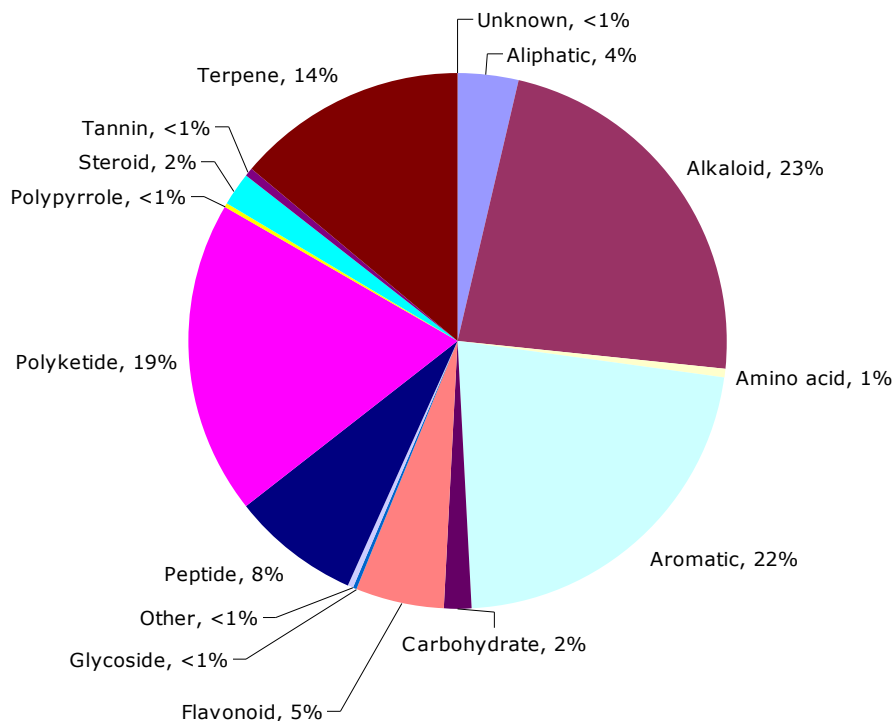
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The MerLion Natural Product Compound Set (NP002) is a library of 1,844 purified natural products arrayed in 96-well microtitre plates in a screen-ready format. Most of these compounds have been isolated at MerLion during the course of diverse bioassay-guided isolation projects and thus represent an excellent source of bioactive natural product chemistry (see Figure 1). Most compounds are purified to greater than 80%; however, a small number are simple mixtures of closely related analogues.

Compounds have been dispensed as solutions in neat DMSO in columns 1 to 10; columns 11 and 12 are left empty for the addition of assay controls. Each well contains 5  $\mu$ L of a 1.6 mM solution (8 nmoles of compound) which is approximate to 4  $\mu$ g material (assuming an average molecular weight of 500 Da).

Additional quantities of individual compounds can be requested. Availability is dependent on the amounts of material originally isolated, therefore, in some instances, re-supply may require re-isolation of material from the original source.

Important note: the product comprises only the physical material supplied, i.e. chemical materials dispensed into screening plates, which are provided on a non-exclusive basis, and does not extend to any producer microorganism or other source from which the compounds were obtained nor guarantee re-supply of any of the chemical materials.



**Figure 1.** Diversity of natural product scaffolds represented within the MerLion NP library

## Storage and Use

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The Natural Products Compound Set contains purified compounds in neat DMSO solutions. They should be stored below  $-20^{\circ}\text{C}$  (preferably lower) until use.

Dilution of compounds prior to assay should be performed in neat DMSO or through addition of water or an aqueous buffer to generate a DMSO/aqueous solution.

- (i) Dilution in DMSO: Store below  $-20^{\circ}\text{C}$ . Use within 1 year. Warning: freeze-thawing may result in precipitation of some material and should be avoided as much as possible.
- (ii) Dilution in water or buffer: Store at  $4^{\circ}\text{C}$ . Use within 2 weeks.

**Example:** 35  $\mu\text{L}$  of water is added to give a 200  $\mu\text{M}$  working solution in 12.5% Aq/DMSO. Further dilution of 20-fold in the assay will give a Final Assay Concentration (FAC) of 10  $\mu\text{M}$ .

## Safety

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This product contains purified compounds from actinomycete, eubacterial and fungal strains and from various plants, collected from diverse environments and localities. The samples contain uncharacterised chemicals and therefore should be handled as if potentially hazardous.

Always wear personal protective equipment (laboratory gowns, safety spectacles and gloves) and dispose of as laboratory waste. Avoid aerosols and dispense DMSO solutions within fume hoods or well-ventilated areas.

## Other Products

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1. Actinomycete Superset (Product code 18AS)
2. Fungal Superset (Product code 18FS)