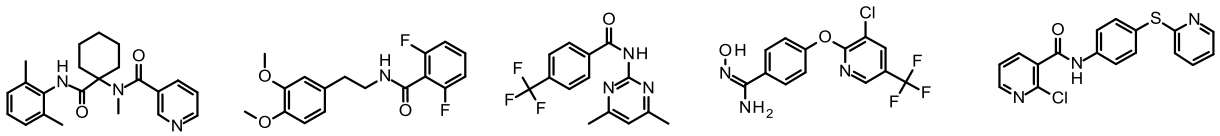
Key Organics
Chemistry | Innovation | Quality

The BIONET Insecticide Focussed Screening Library

A set of simple criteria have been derived that can guide screening-compound purchase towards compounds that are more likely to have whole organism insecticidal activity [1]. Key Organics have combined these simple rules with a MW and cLogP range designed to confer Leadlike properties. We have also taken into consideration frequency of occurrence of a number of Functional Groups in insecticides [1] and excluded those with low frequency (alcohol, amine, aldehyde, thiophene, imidazole, sulphonamide) and engineered a high prevalence of functional groups that are common in insecticides (carboxamide, benzene, ester, aromatic and non aromatic heterocycles) to produce a screening library with physiochemical properties suitable for Agrochemical screening applications.

.Physiochemical Property	Herbicidal Criteria
H-bond donors	≤2
H-bond acceptors	≥1 and ≤8
MW	220 - 435
Rotatable bonds	≤ 12
CLogP	≤ 4.5
PSA	≥15 and ≤83
Purity	≥ 90%



The BIONET Insecticide Focussed Screening Library is available custom-weighed in milligram or micromolar quantities. Customers can purchase the entire library or select any number of compounds as required.

[1] Tice. M C. *Pest Manag Sci 57:3-16 (2001)*