Key Organics
The right side of the Equation

BIONET
SCREENING COMPOUNDS

Make Plants Drought-Resistant

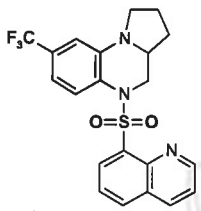
BIONET Synthetic Mimics of Pyrabactin

Key Organics offers a wide selection of synthetic mimics available, ex-stock, from the Bionet Screening collection. Key Organics designs and synthesises libraries based around this target and many more. Please contact us for details.

Pyrabactin is a recently discovered synthetic mimic of a plant hormone (abscisic acid, ABA) [1,2]. ABA is a stress hormone produced naturally in plants that is known to help crops survive drought and other environmental stresses. According to Sean Cutler, at the University of California-Riverside, pyrabactin appears to turn on the ABA pathway, meaning that when applied to plants it acts similarly to ABA, helping them survive with less water [3]. The agricultural industry is globally a major water consumer. Currently, 69% of all water withdrawn for human use on an annual basis is soaked up by agriculture, mostly in the form of irrigation. Therefore, there is an increased need for better crops that require less water, and for new tools for dealing with mild droughts when they occur [3]. ABA is light-sensitive, with a short-shelf life; it rapidly degrades as soon as it is sprayed on plants. Pyrabactin has been identified as a successful alternative. However, the agrochemical industry is still searching for commercial compounds that could meet quality, price and availability requirements.

1. S. Cutler *et al*, *Science*, **2009**, *324*, 1068.
2. E. Grill *et al*, *Science*, **2009**, *324*, 1064.
3. N. Notman, *Chemistry World*, **2009**, *6*, 22.

1X-0291



	GBP (£)
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5mg	24
10mg	35

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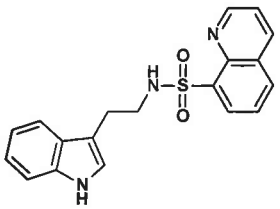

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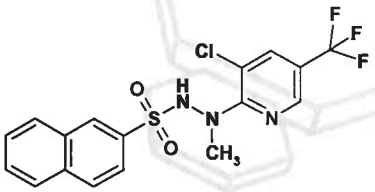
4M-918



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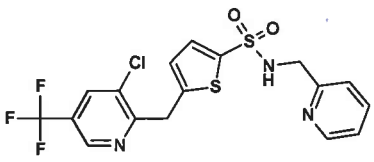
1H-054



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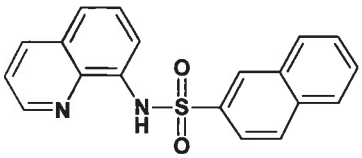

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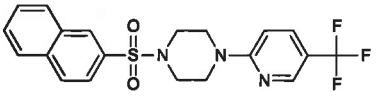

	GBP (£)
1mg	20
5mg	24
10mg	35

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BIONET Synthetic Mimics of Pyrabactin

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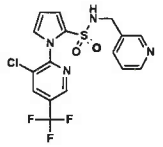

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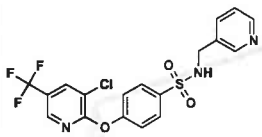

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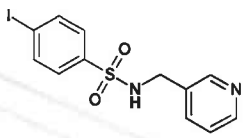

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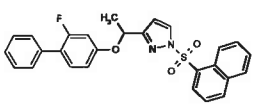

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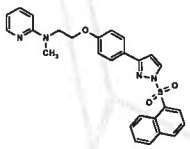

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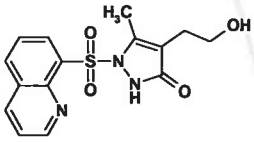

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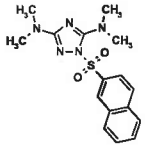

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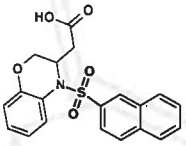

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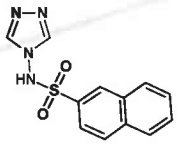

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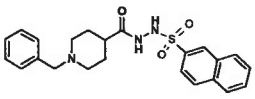

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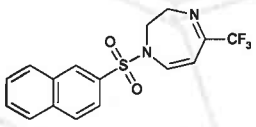

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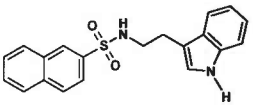

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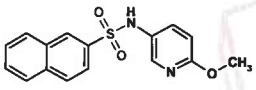

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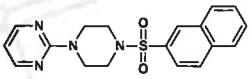

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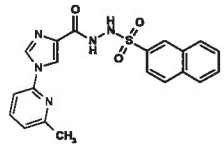

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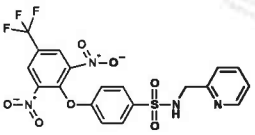

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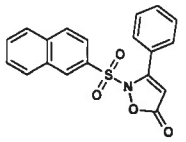

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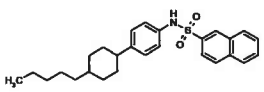

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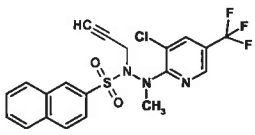

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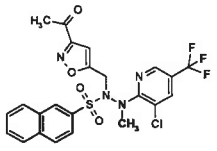

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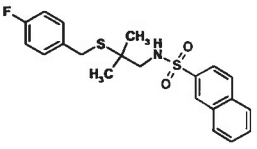

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