

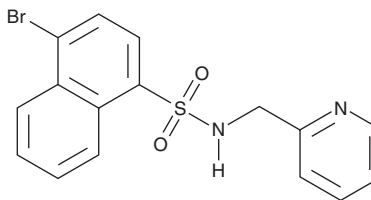
PRODUCT INFORMATION



Pyrabactin

Item No. 44566

CAS Registry No.: 419538-69-5
Formal Name: 4-bromo-N-(2-pyridinylmethyl)-1-naphthalenesulfonamide
MF: $C_{16}H_{13}BrN_2O_2S$
FW: 377.3
Purity: $\geq 98\%$
Supplied as: A solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Pyrabactin is supplied as a solid. A stock solution may be made by dissolving the pyrabactin in the solvent of choice, which should be purged with an inert gas. Pyrabactin is soluble (≥ 10 mg/ml) in DMSO. Pyrabactin is sparingly soluble (1-10 mg/ml) in ethanol.

Description

Pyrabactin is a plant growth regulator and synthetic abscisic acid (ABA) agonist.¹⁻³ It inhibits *A. thaliana* PYL1-dependent ABI1 protein phosphatase 2C (PP2C) activity in a cell-free assay ($IC_{50} = 1.14 \mu M$).¹ Pyrabactin (1 μM) increases root hydraulic conductivity in *Z. mays* seedlings.³ It also induces stomatal closure in abaxial epidermal strips of *P. sativum*.²

References

1. Hao, Q., Yin, P., Yan, C., *et al.* Functional mechanism of the abscisic acid agonist pyrabactin. *J. Biol. Chem.* **285**(37), 28946-28957 (2010).
2. Puli, M.R. and Raghavendra, A.S. Pyrabactin, an ABA agonist, induced stomatal closure and changes in signalling components of guard cells in abaxial epidermis of *Pisum sativum*. *J. Exp. Bot.* **63**(3), 1349-1359 (2012).
3. Fan, W., Li, J., Jia, J., *et al.* Pyrabactin regulates root hydraulic properties in maize seedlings by affecting PIP aquaporins in a phosphorylation-dependent manner. *Plant Physiol. Biochem.* **94**, 28-34 (2015).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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