

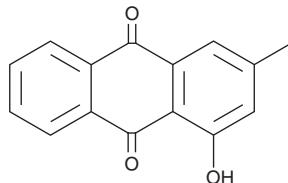
PRODUCT INFORMATION



Pachybasin

Item No. 27268

CAS Registry No.: 2549-78-2
Formal Name: 1-hydroxy-3-methyl-9,10-anthracenedione
Synonym: 1-Hydroxy-3-methylanthraquinone
MF: $C_{15}H_{10}O_3$
FW: 238.2
Purity: $\geq 70\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years
Item Origin: Fungus/Unidentified sp.



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

Laboratory Procedures

Pachybasin is supplied as a solid. A stock solution may be made by dissolving the pachybasin in the solvent of choice, which should be purged with an inert gas. Pachybasin is soluble in ethanol, methanol, DMSO, and dichloromethane.

Description

Pachybasin is an anthraquinone fungal metabolite.¹⁻³ It inhibits the growth of *E. coli*, *S. aureus*, *B. subtilis*, and *M. luteus* bacteria (MICs = 64, 32, 64, and 64 $\mu\text{g/ml}$, respectively) and *C. albicans*, *S. cerevisiae*, *A. niger*, *A. flavus*, and *F. oxysporum* fungi (MICs = 64, 64, 64, 64, and 16 $\mu\text{g/ml}$, respectively).¹ It also induces germ tube malformation in *B. graminis* fungi.² Pachybasin induces developmental retardation and notochord distortions and increases mortality in zebrafish embryos when used at concentrations ranging from 1 to 100 μM .³

References

1. Wulansari, D., Jamal, Y., Tiwi, P., *et al.* Pachybasin, a major metabolite from culture broth of endophytic coelomyceteous AFKR-18 fungus isolated from a yellow moonsheed plant, *Arcangelisia flava* (L.) Merr. *HAYATI J. Biosci.* **21**(2), 95-100 (2014).
2. Hildebrandt, U., Marsell, A., and Riederer, M. Direct effects of physcion, chrysophanol, emodin, and pachybasin on germination and appressorium formation of the barley (*Hordeum vulgare* L.) powdery mildew fungus *Blumeria graminis* f. sp. *hordei* (DC.) Speer. *J. Agric. Food Chem.* **66**(13), 3393-3401 (2018).
3. Lin, Y.-R., Peng, K.-C., Chan, M.-H., *et al.* Effect of pachybasin on general toxicity and developmental toxicity in vivo. *J. Agric. Food Chem.* **65**(48), 10489-10494 (2017).

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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