

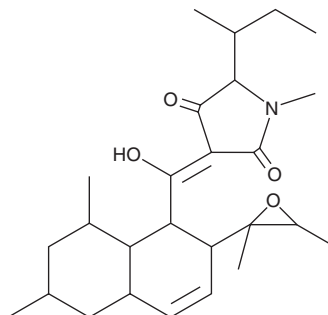
# PRODUCT INFORMATION



## Antibiotic PF 1052

Item No. 27743

**CAS Registry No.:** 147317-15-5  
**Formal Name:** 3-[[2-(2,3-dimethyl-2-oxiranyl)-1,2,4a,5,6,7,8,8a-octahydro-6,8-dimethyl-1-naphthaleny]hydroxymethylene]-1-methyl-5-(1-methylpropyl)-2,4-pyrrolidinedione  
**MF:** C<sub>26</sub>H<sub>39</sub>NO<sub>4</sub>  
**FW:** 429.6  
**Purity:** ≥95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Fungus/*Phoma* sp. FKI-1840



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

### Laboratory Procedures

Antibiotic PF 1052 is supplied as a solid. A stock solution may be made by dissolving the antibiotic PF 1052 in the solvent of choice, which should be purged with an inert gas. Antibiotic PF 1052 is soluble in organic solvents such as methanol and DMSO.

### Description

Antibiotic PF 1052 is a fungal metabolite originally isolated from *Phoma*.<sup>1,2</sup> It is active against *S. aureus*, *S. parvulus*, and *C. perfringens* (MICs = 3.13, 0.78, and 0.39 µg/ml, respectively), among others.<sup>1</sup> It inhibits neutrophil migration in a wound assay using zebrafish larvae expressing GFP-labeled neutrophils, reducing pseudopodia formation and inducing rounding of neutrophils.<sup>2</sup> Antibiotic PF 1052 is selective for neutrophil migration over macrophage migration in zebrafish larvae. It also inhibits the migration of murine neutrophils when used at concentrations of 10 and 20 µM.

### References

1. Sasaki, T., Takagi, M., Yaguchi, M., *et al.* Novel antibiotic PF1052 and its manufacture with *Phoma* species. *Meiji Seika Kaisha, Ltd. JP04316578A* (1992).
2. Wang, X., Robertson, A.L., Li, J., *et al.* Inhibitors of neutrophil recruitment identified using transgenic zebrafish to screen a natural product library. *Dis. Model Mech.* **7**(1), 163-169 (2014).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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