

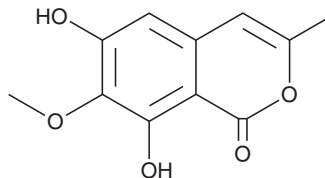
# PRODUCT INFORMATION



## Reticulol

Item No. 23148

**CAS Registry No.:** 26246-41-3  
**Formal Name:** 6,8-dihydroxy-7-methoxy-3-methyl-1H-2-benzopyran-1-one  
**Synonyms:** 6,8-dihydroxy-7-methoxy-3-methyl Isocoumarin, NSC 294978  
**MF:** C<sub>11</sub>H<sub>10</sub>O<sub>5</sub>  
**FW:** 222.2  
**Purity:** ≥95%  
**Supplied as:** A powder  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

Reticulol is supplied as a powder. A stock solution may be made by dissolving the reticulol in the solvent of choice, which should be purged with an inert gas. Reticulol is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

### Description

Reticulol is an isocoumarin derivative produced by certain species of *Streptomyces* that inhibits cAMP phosphodiesterase (IC<sub>50</sub> = 41 μM).<sup>1,2</sup> It also inhibits DNA topoisomerase I when used at a concentration of 45 μM in B16F10 melanoma cells.<sup>3</sup> Reticulol has antifungal activity against *T. mentagrophyes* with a MIC of 1.8 μM.<sup>4</sup> It is cytotoxic against A427 human lung and B16F10 mouse melanoma cells at concentrations of 25 and 200 μM, respectively, and inhibits lung metastasis in mice.<sup>4</sup>

### References

1. Mitscher, L.A., Andres, W.W., and McCrae, W. Reticulol, a new metabolic isocoumarin. *Experientia* **20**(5), 258-259 (1964).
2. Furutani, Y., Shimada, M., Hamada, M., et al. Reticulol, an inhibitor of cyclic adenosine 3', 5'-monophosphate phosphodiesterase. *J. Antibiot. (Tokyo)* **28**(7), 558-560 (1975).
3. Lim, D.-S., Kwak, Y.-S., Lee, K.-H., et al. Topoisomerase I inactivation by reticulol and its *in vivo* cytotoxicity against B16F10 melanoma. *Chemotherapy* **49**(5), 257-263 (2003).
4. Lim, D.-S., Kwak, Y.-S., Kim, J.-H., et al. Antitumor efficacy of reticulol from *Streptoverticillium* against the lung metastasis model B16F10 melanoma. Lung metastasis inhibition by growth inhibition of melanoma. *Chemotherapy* **49**(3), 146-153 (2003).

#### 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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