

# PRODUCT INFORMATION



## Forphenicine

Item No. 33504

CAS Registry No.: 57784-96-0

Formal Name: αS-amino-4-formyl-3-hydroxy-benzeneacetic acid

MF: C<sub>9</sub>H<sub>9</sub>NO<sub>4</sub>

FW: 195.2

Purity: ≥90%

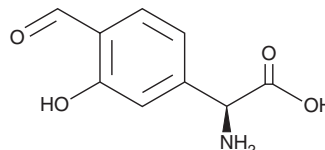
Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

Item Origin: Bacterium/*Streptomyces fulvoviridis* var. *acarbodicus* MC974-A5

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



### Laboratory Procedures

Forphenicine is supplied as a solid. A stock solution may be made by dissolving the forphenicine in the solvent of choice, which should be purged with an inert gas. Forphenicine is soluble in acetic acid (diluted) and hydrochloric acid (diluted). It is also soluble in water.

### Description

Forphenicine is a bacterial metabolite that has been found in *S. fulvoviridis* and an inhibitor of alkaline phosphatase (IC<sub>50</sub> = 0.036 µg/ml for the chicken intestine enzyme).<sup>1</sup> It inhibits the growth of HL-60 leukemia cells when used at a concentration of 10 µM.<sup>2</sup> Forphenicine (50 and 500 µg/animal) increases survival in a guinea pig model of experimental autoimmune encephalomyelitis (EAE).<sup>3</sup>

### References

1. Aoyagi, T., Yamamoto, T., Kojiri, K., *et al.* Forphenicine, and inhibitor of alkaline phosphatase produced by actinomycetes. *J. Antibiot. (Tokyo)* **31(3)**, 244-246 (1978).
2. Miura, K., Sawa, T., Takeuchi, T., *et al.* Effects of enzyme inhibitors in inhibiting the growth and inducing the differentiation of human promyelocytic leukemia cells, HL-60. *J. Antibiot. (Tokyo)* **39(5)**, 734-735 (1986).
3. Aoyagi, T., Wada, T., Nagai, M., *et al.* Low-molecular-weight enzyme inhibitors suppress the development of experimental allergic encephalomyelitis. *Experientia* **40(12)**, 1405-1407 (1984).

#### 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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