# PRODUCT INFORMATION



## Leucomycin A<sub>13</sub>

Item No. 28121

CAS Registry No.: 78897-52-6

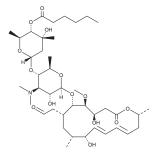
4<sup>B</sup>-hexanoate leucomycin V Formal Name:

Synonym: Kitasamycin A<sub>13</sub> MF: C<sub>41</sub>H<sub>69</sub>NO<sub>14</sub> FW: 800.0

**Purity:** ≥99% Supplied as: A solid Storage: -20°C Stability: ≥4 years

Item Origin: Bacterium/Streptomyces kitasatoensis

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



### **Laboratory Procedures**

Leucomycin  $A_{13}$  is supplied as a solid. A stock solution may be made by dissolving the leucomycin  $A_{13}$  in the solvent of choice. Leucomycin A<sub>13</sub> is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide, which should be purged with an inert gas.

Leucomycin A<sub>13</sub> is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

#### Description

Leucomycin A<sub>13</sub> is a macrolide antibiotic and a component of the leucomycin complex originally isolated from S. kitasatoensis. It is active against B. subtilis, S. aureus, M. luteus, and E. coli with MIC values of 0.16, 0.16, 0.08 and >10  $\mu$ g/ml, respectively.<sup>2</sup> It binds to ribosomes with an IC<sub>50</sub> value of 1.2  $\mu$ M in a radioligand binding assay.

#### References

- 1. Hu, M. and Hu, C.-Q. Identification of the components of 16-membered macrolide antibiotics by LC/MS. Anal. Chim. Acta 535(1-2), 89-99 (2005).
- 2. Tanaka, H., Moriquchi, I., Hirono, S., et al. Quantitative structure-activity relationships of O-acyl derivatives of leucomycin for antimicrobial and ribosome-binding activities. Chem. Pharm. Bull. (Tokyo) 33(7), 2803-2808 (1985).

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

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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