

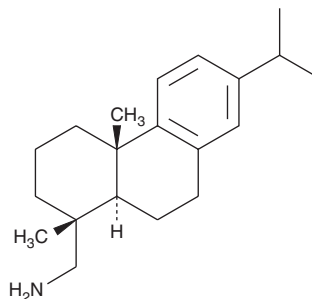
# PRODUCT INFORMATION



## Leelamine

Item No. 10006148

**CAS Registry No.:** 1446-61-3  
**Formal Name:** 1R,2,3,4,4aS,9,10,10aR-octahydro-1,4a-dimethyl-7-(1-methylethyl)-1-phenanthrenemethanamine  
**Synonyms:** Dehydroabietylamine, NSC 2955  
**MF:** C<sub>20</sub>H<sub>31</sub>N  
**FW:** 285.5  
**Purity:** ≥98%  
**Supplied as:** A solution in ethanol  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

Leelamine is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of leelamine in these solvents is approximately 30 mg/ml.

Leelamine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of leelamine should be diluted with the aqueous buffer of choice. Leelamine has a solubility of 0.25 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Leelamine is a diterpene amine that has been found in gum resin and has diverse biological activities.<sup>1-3</sup> It inhibits pyruvate dehydrogenase kinase (PDHK; IC<sub>50</sub> = 9.5 μM).<sup>4</sup> Leelamine is active against the plant pathogenic fungus *B. cinerea* (EC<sub>50</sub> = 70 μM).<sup>2</sup> It induces apoptosis in UACC-903 and 1205Lu melanoma cell lines when used at a concentration of 3 μM.<sup>3</sup> Leelamine (100 and 300 μmol/kg per day) reduces blood glucose levels in an *ob/ob* mouse model of type II diabetes.<sup>1</sup>

### References

1. Aicher, T.D., Damon, R.E., Koletar, J., *et al.* Triterpene and diterpene inhibitors of pyruvate dehydrogenase kinase (PDK). *Bioorg. Med. Chem. Lett.* **9(15)**, 2223-2228 (1999).
2. Yoshida, M., Kawasaki, A., Yukimoto, M., *et al.* Detection of the effects of fungicides on the cell membrane by proton nuclear magnetic resonance spectroscopy. *Pest. Biochem. Phys.* **38(2)**, 172-177 (1990).
3. Kuzu, O.F., Gowda, R., Sharma, A., *et al.* Leelamine mediates cancer cell death through inhibition of intracellular cholesterol transport. *Mol. Cancer Ther.* **13(7)**, 1690-1703 (2014).
4. Aicher, T.D., Damon, R.E., Koletar, J., *et al.* Triterpene and diterpene inhibitors of pyruvate dehydrogenase kinase (PDK). *Bioorg. Med. Chem. Lett.* **9(15)**, 2223-2228 (1999).

#### 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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM