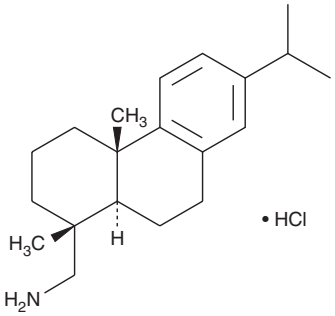
PRODUCT INFORMATION

Leelamine (hydrochloride)

Item No. 10008614

CAS Registry No.:	16496-99-4
Formal Name:	1R,2,3,4,4aS,9,10,10aR-octahydro-1,4a-dimethyl-7-(1-methylethyl)-1-phenanthrenemethanamine, monohydrochloride
Synonym:	Dehydroabietylamine
MF:	$C_{20}H_{31}N \bullet HCl$
FW:	321.9
Purity:	≥98%
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



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

Laboratory Procedures

Leelamine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the leelamine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Leelamine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of leelamine (hydrochloride) in ethanol and DMF is approximately 20 mg/ml and approximately 25 mg/ml in DMSO.

Leelamine (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, leelamine (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Leelamine (hydrochloride) has a solubility of approximately 0.15 mg/ml in a 1:2 solution of DMSO: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 molecule whose name derives from the Sanskrit word *leela* which means "play". It has weak affinity for the human central cannabinoid (CB_1) and peripheral cannabinoid (CB_2) receptors, exhibiting 20% displacement of [^{3}H]-CP55940 at a concentration of 10 µM.[1] Leelamine inhibits pyruvate dehydrogenase kinase (PDK) with and IC_{50} value of 9.5 µM.[2] Derivatives of leelamine exhibit anti-inflammatory activity and show moderate inhibition of phospholipase A_2 activity from a variety of sources.[3]

References

1. Martin, B.R. Personal Communication.
2. 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).
3. Wilkerson, W., DeLucca, I., Galbraith, W., *et al.* Antiinflammatory phospholipase-A_2 inhibitors. I. *Eur. J. Med. Chem.* **26(7)**, 667-676 (1991).

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