PRODUCT INFORMATION



2-Imino-4-methylpiperidine (acetate)

Item No. 81015

CAS Registry No.: 165383-72-2

Formal Name: 2-pyridinamine-3,4,5,6-tetrahydro-

4-methyl, monoacetate

MF: $C_6H_{12}N_2 \bullet C_2H_3O_2$

FW: 171.2 **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

2-Imino-4-methylpiperidine (acetate) is supplied as a crystalline solid. A stock solution may be made by dissolving the 2-Imino-4-methylpiperidine (acetate) in an organic solvent purged with an inert gas. 2-Imino-4-methylpiperidine (acetate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 2-Imino-4-methylpiperidine (acetate) in these solvents is approximately 5 mg/ml.

Organic solvent-free aqueous solutions of 2-Imino-4-methylpiperidine (acetate) can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of 2-Imino-4-methylpiperidine (acetate) in PBS, pH 7.2, is approximately 25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

2-Imino-4-methylpiperidine is a potent inhibitor of nitric oxide synthase (NOS). 2-Imino-4-methylpiperidine exhibits IC₅₀ values of 0.1 μM, 1.1 μM, and 0.2 μM for human iNOS, ecNOS, and ncNOS, respectivley, at an arginine concentration of 30 μM.¹ In LPS-treated rats, 2-Imino-4-methylpiperidine gave 87% inhibition of plasma nitrate/nitrite levels compared to saline-treated control animals. 1

Reference

1. Webber, R.K., Metz, S., Moore, W.M., et al. Substituted 2-iminopiperidines as inhibitors of human nitric oxide synthase isoforms. J. Med. Chem. 41, 96-101 (1998).

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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