Product Information

Myosmine
Item No. 17908

CAS Registry No.: 532-12-7
Formal Name: 3-(3,4-dihydro-2H-pyrrol-5-yl)-pyridine
MF: C_{9}H_{14}N_{2}
FW: 146.2
Purity: ≥98%
Stability: ±2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max} 234 nm

Laboratory Procedures
For long term storage, we suggest that myosmine be stored as supplied at -20°C. It should be stable for at least two years.

Myosmine is supplied as a crystalline solid. A stock solution may be made by dissolving the myosmine in the solvent of choice. Myosmine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of myosmine in these solvents is approximately 30 mg/ml.

Myosmine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, myosmine should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Myosmine has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol-PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description
(±)-Nicotine (Item No. 16535) is the racemic mixture of the dominant alkaloid found in tobacco plants. It acts as an agonist at neuronal nicotinic acetylcholine receptors (K_{i} = 481 and 11.1 nM for α3β4 and α4β2 subtypes, respectively) and possesses addictive and teratogenic properties.1 Myosmine is a minor tobacco alkaloid that is structurally related to nicotine. It can also be found in a variety of other plants that are commonly eaten, including maize, rice, and potato.2 Myosmine weakly binds to neuronal acetylcholine receptors (K_{i} = 3.3 µM).3 However, it can be nitrosated, giving rise to a DNA adduct.4,5

References

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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