PRODUCT INFORMATION



Reserpine

Item No. 16474

CAS Registry No.: 50-55-5

Formal Name: $(3\beta, 16\beta, 17\alpha, 18\beta, 20\alpha)$ -

> 11,17-dimethoxy-18-[(3,4,5trimethoxybenzoyl)oxy]-yohimban-16-carboxylic acid, methyl ester

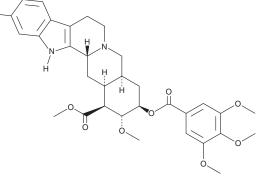
Synonyms: NSC 59272, NSC 237659, Rausedil

MF: $C_{33}H_{40}N_2O_9$ FW: 608.7 **Purity:** ≥98%

 λ_{max} : 216, 267, 296 nm UV/Vis.: A crystalline solid Supplied as:

-20°C Storage: ≥4 years Stability:

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



Laboratory Procedures

Reserpine is supplied as a crystalline solid. A stock solution may be made by dissolving the reserpine in the solvent of choice, which should be purged with an inert gas. Reserpine is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of reserpine in these solvents is approximately 10 and 20 mg/ml, respectively.

Reserpine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, reserpine should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Reserpine has a solubility of approximately 0.1 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Reserpine is an alkaloid isolated from dried roots of R. serpentine, which is used in traditional Indian medicine. Reserpine irreversibly inhibits both human isoforms of vesicular monoamine transporter, VMAT1 and VMAT2 (K_is = 34 and 12 nM, respectively). 1.2 As this leads to metabolism of monoamines, reserpine is used to experimentally deplete monoamines in animals.³⁻⁵ Reserpine also inhibits the multidrug resistance protein P-glycoprotein ($IC_{50} = 0.5 \mu M$).⁶

References

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- 3. Hu, X.T., Wachtel, S.R., Galloway, M.P., et al. J. Neurosci. 10(7), 2318-2329 (1990).
- 4. Stanwood, G.D., Lucki, I., and McGonigle, P. J. Pharmacol. Exp. Ther. 295(3), 1232-1240 (2000).
- 5. Matsumoto, K., Mizowaki, M., Suchitra, T., et al. Eur. J. Pharmacol. 317(1), 75-81 (1996).
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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.

WARRANTY AND LIMITATION OF REMEDY

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