

PRODUCT INFORMATION

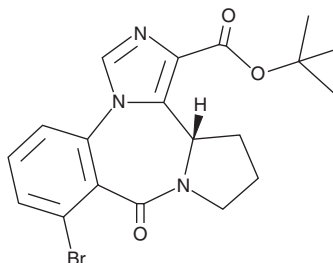


Bretazenil

Item No. 37274

CAS Registry No.: 84379-13-5
Formal Name: 8-bromo-11,12,13,13aS-tetrahydro-9-oxo-9H-imidazo[1,5-a]pyrrolo[2,1-c][1,4]benzodiazepine-1-carboxylic acid, 1,1-dimethylethyl ester

Synonym: Ro 16-6028
MF: C₁₉H₂₀BrN₃O₃
FW: 418.3
Purity: ≥98%
UV/Vis.: λ_{max}: 217 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Description

Bretazenil (Item No. 37274) is an analytical reference standard categorized as a GABA_A receptor positive allosteric modulator.¹ Bretazenil has anxiolytic-like effects in mice.² It induces self-administration in rhesus monkeys but has a lower physical dependence liability in mice compared with benzodiazepines.^{3,4} This product is intended for analytical forensic applications. This product is also available as a general research tool (Item No. 28411).

References

1. Puia, G., Dučić, I., Vicini, S., *et al.* Molecular mechanisms of the partial allosteric modulatory effects of bretazenil at γ -aminobutyric acid type A receptor. *Proc. Natl. Acad. Sci. USA* **89(8)**, 3620-3624 (1992).
2. Cole, J.C. and Rodgers, R.J. An ethological analysis of the effects of chlordiazepoxide and bretazenil (Ro 16-6028) in the murine elevated plus-maze. *Behav. Pharmacol.* **4(6)**, 573-580 (1993).
3. Licata, S.C. and Rowlett, J.K. Self-administration of bretazenil under progressive-ratio schedules: Behavioral economic analysis of the role intrinsic efficacy plays in the reinforcing effects of benzodiazepines. *Drug Alcohol Depend.* **113(2-3)**, 157-164 (2011).
4. Mirza, N.R. and Nielsen, E.Ø. Do subtype-selective γ -aminobutyric acid_A receptor modulators have a reduced propensity to induce physical dependence in mice? *J. Pharmacol. Exp. Ther.* **316(3)**, 1378-1385 (2006).

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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