

Product Name: Dihydro-β-erythroidine hydrobromide

Catalog No.: 2349

Batch No.: 11

CAS Number: 29734-68-7

IUPAC Name: (2*S*,13*bS*)-2-Methoxy-2,3,5,6,8,9,10,13-octahydro-1*H*,12*H*-benzo[*j*]pyrano[3,4-*g*]indolizin-12-one hydrobromide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₆H₂₁NO₃.HBr

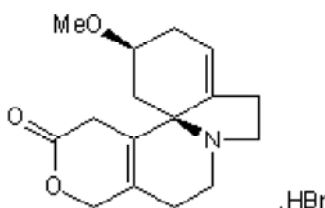
Batch Molecular Weight: 356.26

Physical Appearance: White solid

Solubility: water to 100 mM
DMSO to 25 mM

Storage: Desiccate at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.45 (Chloroform:Methanol [9:1])

HPLC: Shows 98.1% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Optical Rotation: [α]_D = +106.8 (Concentration = 1, Solvent = Water)

Microanalysis:

| | Carbon | Hydrogen | Nitrogen |
|-------------|--------|----------|----------|
| Theoretical | 53.94 | 6.22 | 3.93 |
| Found | 53.96 | 6.29 | 3.91 |

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956

Product Name: Dihydro-β-erythroidine hydrobromide

Catalog No.: 2349

Batch No.: 11

CAS Number: 29734-68-7

IUPAC Name: (2S,13bS)-2-Methoxy-2,3,5,6,8,9,10,13-octahydro-1H,12H-benzo[*j*]pyrano[3,4-*g*]indolizin-12-one hydrobromide

Description:

Competitive nicotinic acetylcholine receptor antagonist with moderate selectivity for the neuronal α4 receptor subunit (IC₅₀ values are 0.19 and 0.37 μM for α4β4 and α4β2 receptors respectively). Antagonizes behavioral effects of nicotine in vivo.

Physical and Chemical Properties:

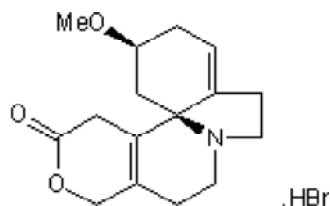
Batch Molecular Formula: C₁₆H₂₁NO₃.HBr

Batch Molecular Weight: 356.26

Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water to 100 mM

DMSO to 25 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Harvey et al (1996) Multiple determinants of dihydro-β-erythroidine sensitivity on rat neuronal nicotinic receptor α subunits. *J.Neurochem.* **67** 1953. PMID: 8863500.

Damaj et al (1995) In vivo pharmacological effects of dihydro-β-erythroidine, a nicotinic antagonist, in mice. *Psychopharmacology* **117** 67. PMID: 7724704.

Williams and Robinson (1984) Binding of the nicotinic cholinergic antagonist, dihydro-β-erythroidine, to rat brain tissue. *J.Neurosci.* **4** 2906. PMID: 6502210.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956