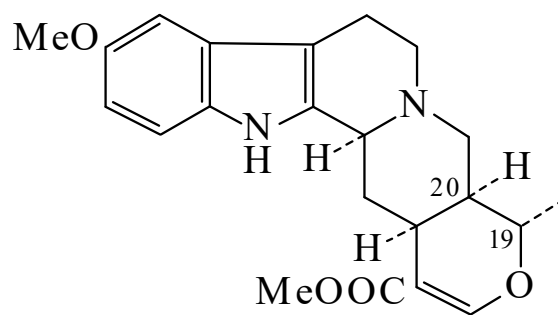




>>Entry Name: Aricine

Synonym(s): Heterophylline‡. Cinchovatine



CAS Registry Number: 482-91-7

Molecular Formula: $C_{22}H_{26}N_2O_4$

Molecular Weight: 382.458

Accurate Mass: 382.189258

Percentage Composition: C 69.09%; H 6.85%; N 7.32%; O 16.73%

Biological Source: Alkaloid from several *Cabucala*, *Ochrosia*, *Rauwolfia* and *Aspidosperma* spp., also from *Cinchona ledgeriana* (Apocynaceae, Rubiaceae)

Physical Description: Cryst. (EtOH aq.)

Melting Point: Mp 190 dec.°

Optical Rotation: $[\alpha]_D^{20} -91$ (c, 1.4 in $CHCl_3$). $[\alpha]_D^{20} -63$ (c, 1.5 in Py). $[\alpha]_D^{20} -57$ (c, 1.0 in EtOH)

UV: [neutral] λ_{max} 229 (ϵ 34850); 281 (ϵ 9600) (EtOH) (Berdy)

>>Derivative: Hydrochloride

Physical Description: Plates (MeOH/Me₂CO)

Melting Point: Mp 254°

Optical Rotation: $[\alpha]_D^{20} -5$ (c, 0.9 in 50% EtOH aq.)

>>Derivative: Hydrobromide

Physical Description: Needles (MeOH)

Melting Point: Mp 262-263 dec.°

>>Derivative: Oxalate

Physical Description: Cryst. (EtOH or MeOH)

Melting Point: Mp 234-235 dec.°

>>Derivative: Tartrate

Physical Description: Plates (MeOH)

Melting Point: Mp 208-209 dec.°

Optical Rotation: $[\alpha]_D^{20} -10$ (c, 0.8 in 50% EtOH aq.)

>>Derivative: 19,20-Diepimer

Synonym(s): Raumitorine

CAS Registry Number: 549-74-6

Molecular Formula: $C_{22}H_{26}N_2O_4$

Molecular Weight: 382.458

Accurate Mass: 382.189258

Percentage Composition: C 69.09%; H 6.85%; N 7.32%; O 16.73%

Biological Source: Alkaloid from *Rauwolfia vomitoria* (Apocynaceae)

Physical Description: Needles (MeOH)

Melting Point: Mp 138°

Optical Rotation: $[\alpha]_D^{20} +60$ (c, 0.54 in $CHCl_3$)

References:

- Goutarel, R. *et al.*, *Bull. Soc. Chim. Fr.*, 1954, 1481, (*Raumitorine*)
Stoll, A. *et al.*, *Helv. Chim. Acta*, 1955, **38**, 270, (*isol, uv, ir, struct*)
Shamma, M. *et al.*, *J.A.C.S.*, 1963, **85**, 2507, (*stereochem*)
Finch, N. *et al.*, *Tetrahedron*, 1966, **22**, 1327, (*uv, ord, stereochem*)
Sakai, S. *et al.*, *Yakugaku Zasshi*, 1978, **98**, 850; *CA*, **89**, 197771u, (*synth*)