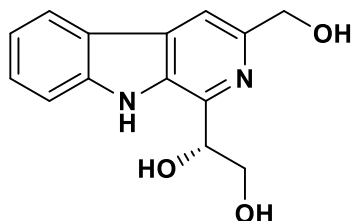


PRODUCT DATA SHEET

Date: Mar. 25, 2020

Pyridindolol (Inhibitor for β -galactosidase)



Synonyms:

Specifications

Code No.	: 00372
CAS#	: 55812-46-9
Molecular Formula	: C ₁₄ H ₁₄ N ₂ O ₃
Molecular Weight	: 258.277
Source	: <i>Streptomyces alboverticillatus</i> MD401-C5
Appearance	: White crystals
Purity	: > 90% (HPLC)
Long Term Storage	: at - 20 °C
Solubility	: Soluble in MeOH, EtOH, n-BuOH, DMSO, DMF, 0.5M-HCl. Slightly soluble in H ₂ O. Insoluble in Benzene, CHCl ₃ and Ethyl ether.

Application Notes

Pyridindolol has inhibitory activity against neutral bovine liver β -galactosidase which has optimal activity at pH 5.0 in tris acetate buffer. The IC₅₀ value is 7.4 × 10⁻⁶ M at pH 4.5.³⁾ However, it shows weak activity against the enzyme in the neutral condition.³⁾ Pyridindolol shows no antibacterial and antifungal activity at 100 μ g/ml and has low toxicity (LD₅₀ >500 mg/kg, intraperitoneal injection) to mice.¹⁾

References

- 1) Pyridindolol, a new β -galactosidase inhibitor produced by actinomycetes.
Aoyagi T, Kumagai M, Hazato T, Hamada M, Takeuchi T, Umezawa H.
J. Antibiot. 1975, **28**, 558-560.
- 2) The structures of pyridindolol, inhibitor of β -galactosidase.
Kumagai M, Naganawa H, Aoyagi T, Umezawa H, Nakamura H, Iitaka Y.
J. Antibiot. 1975, **28**, 876-880.
- 3) Inhibitory activity of pyridindolol on β - galactosidase.
Kumagai M, Aoyagi T, Umezawa H.
J. Antibiot. 1976, **29**, 696-703.