

PRODUCT DATA SHEET

Code No.: BIA-P1349

Pack sizes: 1 mg, 5 mg

Pseudoerythromycin A enol ether

Synonyms :

Specifications

CAS # : 105882-69-7

Molecular Formula : C₃₇H₆₅NO₁₂

Molecular Weight : 715.9

Source : Semi-synthetic
Appearance : White solid
Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Good water solubility.

Application Notes

Pseudoerythromycin A enol ether is a degradation product of erythromycin formed by a complex internal rearrangement of erythromycin A on exposure to neutral to weakly alkaline conditions. The C6–OH forms an internal enol ether with the C9 ketone of erythromycin, while the C11-OH attacks the carbonyl of the lactone to reduce the macrocycle from a 14- to an 11-membered macrolide. Synthetically, pseudoerythromycin A enol ether is prepared by reacting erythromycin enol ether with carbonate. Pseudoerythromycin A enol ether is devoid of antibiotic activity but is an important analytical standard for erythromycin A stability studies.

References

- 1. Study of the stability of erythromycin in neutral and alkaline solutions by liquid chromatography on poly(styrene-divinylbenzene). Paesen J. et al., Int. J. Pharm. 1994, 113, 215.
- 2. Synthesis of ring-contracted derivatives of erythromycin. Kirst H.A. et al., J. Org. Chem. 1987, 52, 4359.

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