

# Pseudoerythromycin A enol ether

## Code: BIA-P1349

Pack sizes: 1 mg, 5 mg



Synonyms

#### Specifications

CAS #	:	105882-69-7
Molecular Formula	:	C <sub>37</sub> H <sub>65</sub> NO <sub>12</sub>
Molecular Weight	:	715.9
Source	:	Semi-synthetic
Appearance	:	White solid
Purity	:	>98%
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 reaction of 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.