

Pimecrolimus

PRODUCT DATA SHEET

Code No.: BIA-P1385

Pack sizes: 1 mg, 5 mg

Synonyms :

Specifications

CAS # : 137071-32-0 Molecular Formula : $C_{43}H_{68}CINO_{11}$

Molecular Weight : 810.5

Source : Streptomyces hygroscopicus

Appearance : White solid
Purity : >95% by HPLC

Long Term Storage : -20°C

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

Application Notes

Pimecrolimus is a semi-synthetic, macrocyclic lactone derived from ascomycin by activation of the 32-hydroxy group with a triflate ester, and nucleophilic substitution with chloride under phase transfer conditions to provide the chloro analogue. Pimecrolimus has been targeted for treatment of inflammatory skin disorders. Like all tacrolimus analogues, pimecrolimus binds to receptor protein, FKBP12. The complex then binds to mTOR preventing it from interacting with target proteins. Pimecrolimus is extensively cited in the literature with over 2,000 citations.

References

1. Method for preparing pimecrolimus. Gyollai V. & Szabo C. US Patent 7,279,571, 2007.

2. Pimecrolimus. Novartis. Schopf R.E. Curr. Opin. Investig. Drugs 2002, 3, 720.

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