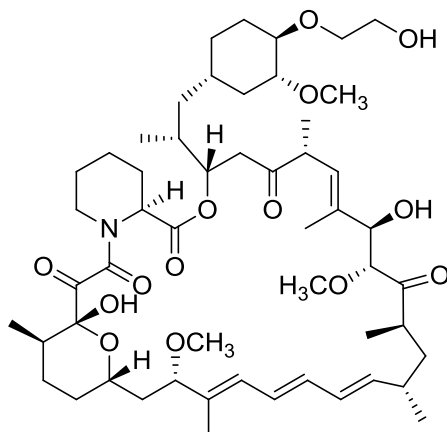


## Everolimus

Code No.: **BIA-E1384**

Pack sizes: **1 mg, 5 mg**



Synonyms : L 683590, FR 900520, Immunomycin, FK 520, WS 7238A, NSC 106410

### Specifications

CAS #	: 104987-12-4
Molecular Formula	: C <sub>43</sub> H <sub>69</sub> NO <sub>12</sub>
Molecular Weight	: 954.2
Source	: <i>Streptomyces hygroscopicus</i>
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

Everolimus is a semi-synthetic macrocyclic lactone prepared from rapamycin by selective alkylation of the 42-hydroxy group with a silyl-protected hydroxyethyl triflate moiety, followed by addition of an ethylhydroxy moiety to provide greater stability and bioavailability. Like all tacrolimus analogues, everolimus binds to receptor protein, FKBP12. The complex then binds to mTOR preventing it from interacting with target proteins. Everolimus is extensively cited in the literature with over 2,000 citations.

### References

1. FR-900520 and FR-900523, novel immunosuppressants isolated from a *Streptomyces*. II. Fermentation, isolation and physico-chemical and biological characteristics. Hatanaka H. et al. J. Antibiot. 1988, 41, 1592.
2. Identity of immunosuppressant FR-900520 with ascomycin. Morisaki M. & Arai T. J. Antibiot. 1992, 45, 126.

Updated: 2 December 2014