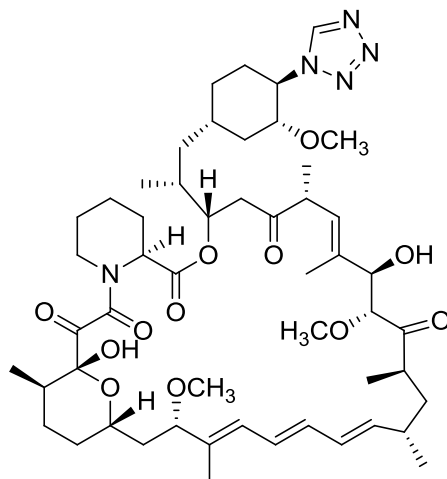


## Zotarolimus

Code No.: **BIA-Z1387**

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



Synonyms :

## Specifications

CAS #	: 221877-54-9
Molecular Formula	: C <sub>52</sub> H <sub>79</sub> N <sub>5</sub> O <sub>12</sub>
Molecular Weight	: 966.2
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

Zotarolimus is a semi-synthetic macrocyclic lactone prepared from rapamycin by preparation of the 42-triflate ester, followed by displacement with tetrazole and purification of the two isomeric products. This structural change affords a less bioavailable product, a preferred profile for some applications. Like all tacrolimus analogues, zotarolimus binds to a receptor protein (FKBP12). The complex then binds to mTOR preventing it from interacting with target proteins. Zotarolimus is extensively cited in the literature with over 200 citations.

## References

1. Compositions, systems, and kits for administering zotarolimus and paclitaxel to blood vessel lumens. Burke S.E. et al. US Patent 7,357,942, 2008.
2. Zotarolimus, a novel sirolimus analogue with potent anti-proliferative activity on coronary smooth muscle cells and reduced potential for systemic immunosuppression Chen Y.W. et al. J. Cardiovasc. Pharmacol. 2007, 49, 228.

Updated: 2 December 2014