



# Rapamycin

## FRAP/mTOR Inhibitor

E1B1842

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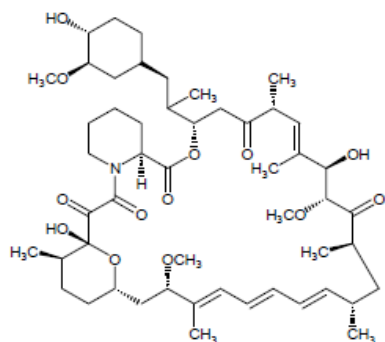
PRODUCT: Rapamycin

CAS NO: 53123-88-9

CATALOG NO.: E1B1842

Package: 0.1mg (1mg/ml in DMSO, 0.1ml)

STRUCTURE:



PHYSICAL APPEARANCE: Off-white or yellow solid

MOLECULAR FORMULA: C<sub>51</sub>H<sub>79</sub>NO<sub>13</sub>

MOLECULAR WEIGHT: 914.2

PURITY: 98% (TLC: 10% MeOH/Methylene chloride; R<sub>f</sub> = 0.51)

STORAGE: Store solutions at -20°C for up to 1 year.

APPLICATION NOTES: Binds to and inhibits the FK506 binding protein (FKBP) proline rotamase. Rapamycin is bound simultaneously by FKBP12 and FRAP (FKBP12-Rapamycin-Associated-Protein). Rapamycin/FKBP complex does not inhibit FRAP PI 4-kinase activity, but does inhibit FRAP autophosphorylation. Rapamycin is unique in its ability to inhibit lymphokine induced cell proliferation at the G1 to S phase. Rapamycin selectively blocks signaling leading to the activation of p70/85 S6 kinase.

REFERENCES:

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6. W.G.Morice et al. J.Biol.Chem. 1993 **268** 3734
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**The pharmacological and toxicological properties of this product have not been fully investigated. Exercise caution in use and handling. This product must not be used in humans.**

**For Research Use Only**