

## Product Datasheet

### Rapamycin (orb1308282)

<b>Catalog Number</b>	orb1308282
<b>Category</b>	Small Molecules
<b>Description</b>	Rapamycin is a natural macrolide and potent mTOR inhibitor, demonstrating high specificity with an IC50 of 0.1 nM in HEK293 cells. This compound is widely used in research for its immunosuppressive properties and ability to induce autophagy, applicable in both in vitro mechanistic studies and in vivo models of aging and disease.
<b>Target</b>	Kinase
<b>Form/Appearance</b>	powder
<b>Purity</b>	>98%
<b>MW</b>	914.2
<b>Biological Activity</b>	mTOR inhibitor
<b>Target Areas</b>	Antifungal Antibacterial Endogenous Metabolite Autophagy FKBP Antibiotic mTOR
<b>Solubility (25°C)</b>	Soluble in DMSO (up to 40 mg/ml) or in Ethanol (up to 90 mg/ml).
<b>CAS Number</b>	53123-88-9
<b>Formula</b>	C <sub>51</sub> H <sub>79</sub> NO <sub>13</sub>
<b>SMILES</b>	[H][C@@]12CC[C@@H](C)[C@@](O)(O1)C(=O)C(=O)N1CCCC[C@@]1([H])C(=O)O[C@@]([H])(CC(=O)[C@H](C)C=C(C)\[C@@H](O)[C@@H](OC)C(=O)[C@H](C)C[C@H](C)\C=C\C=C\C=C(C)[C@H](C2)OC)[C@H](C)C[C@@H]1CC[C@@H](O)[C@@H](C1)OC

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<b>Chemical Name</b>	(7E,15E,17E,19E)-9,10,12,13,14,21,22,23,24,25,26,27,32,33,34aS-Hexadecahydro-9R,27-dihydroxy-3S-[(1R)-2-[(1S,3R,4R)-4-hydroxy-3-methoxycyclohexyl]-1-methylethyl]-10R,21S-dimethoxy-6R,8,12R,14S,20,26R-hexamethyl-23S,27R-epoxy-3H-pyrido[2,1-c][1,4]oxaazacyclohentriacontine-1,5,11,28,29(4H,6H,31H)-pentone
<b>Storage</b>	-20°C
<b>Note</b>	For research use only
<b>Expiration Date</b>	12 months from date of receipt.

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