

Catalog	Unit
TBI1104 - 10MG	10 mg
TBI1104 - 50MG	50 mg

### Product Details

**Formal Name:** (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

**Alternate Names:** Sirolimus; AY-22989; WY-090217; NSC-226080; Rapamune

**Molecular Formula:** C<sub>51</sub>H<sub>79</sub>NO<sub>13</sub>

**Formula Weight:** 914.17

**CAS Number:** 53123-88-9

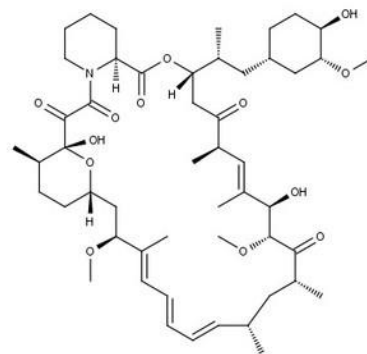
**Purity:** >98%

**Formulation:** Powder

**Solubility:** Soluble in DMSO (up to 40 mg/ml) or in Ethanol (up to 90 mg/ml).

**Storage:** -20°C

**Stability:** ≥ 2 years.



### Applications

mTOR inhibitor

### Functions

Rapamycin (53123-88-9) is a clinically useful immunosuppressant. Inhibits the response to interleukin-2 blocking activation of T- and B-cells. Rapamycin forms a complex with cytosolic FK-binding protein 12 (FKB12) that binds to mTOR Complex1(mTORC1) inhibiting the mammalian target of rapamycin (mTOR). Rapamycin also binds to mTORC2 leading to decreased glucose tolerance and insensitivity to insulin. Induces autophagy.

### Application Procedures

First dissolved in DMSO (up to 40 mg/ml) or in Ethanol (up to 90 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20°C for up to 2 months.

### Relative Products

TBI1170	Mitomycin C
TBI1345	E64, Cysteine protease inhibitor
TBI1347	E64d, Cysteine protease inhibitor
TBI2064	Chromomycin A3
TBI2069	Cytochalasin B
TBI2794	5-EDU, DNA Click labeling probe
TBI2071	Cytochalasin D
TBI1286	Bestatin, Aminopeptidase inhibitor
TBI2140	Gemcitabine
TBI2058	Aphidicolin, DNA polymerase Inhibitor

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