Rapamycin is a macrocyclic triene antibiotic that binds to the cytosolic protein FK-binding protein 12 (FKBP12) and inhibits mTOR pathway by directly binding to the mTOR Complex1 (mTORC1). It is a potent immunosuppressant and has shown anticancer activity. Rapamycin has a variety of uses both in vitro and in vivo and has been used to prevent organ rejection after transplantation.

**TECHNICAL INFORMATION**

**Other Names:** AY-22989, LCP-Siro, RAPA, Rapamune, Sirolimus, SILA 9268A

**Chemical Formula:** $C_{51}H_{79}NO_{13}$

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

**Molecular Weight:** 914.17

**Purity:** >98%

**Appearance:** a crystalline solid

**Solubility:** DMSO

**REFERENCES**


**STORAGE AND HANDLING**

**Storage:** Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

**Stability:** Stock solutions stable at -20°C for up to 2 years.

**Shipping Conditions:** Shipped at room temperature.

**PRODUCT USE**

Soluble in DMSO at 50 mg/ml. If precipitate is observed, vortex for 5 minutes. For most cells, the maximum tolerance to DMSO is less than 0.5%.