Rapamycin is a macrolide initially produced by *Streptomyces* that exhibits immunosuppressive and pro-fibrotic activities. Rapamycin inhibits mTOR by binding FKBP12 and forming a complex that binds directly to mTOR; it is clinically used to prevent rejection in organ transplant patients. Rapamycin prevents IL-2-induced activation of T cells and B cells. Rapamycin also prevents IgA nephropathy, decreasing IgA deposition, inhibiting cell proliferation, and suppressing expression of α-SMA, type III collagen, PDGF, and TGF-β1. Additionally, rapamycin increases connective tissue growth factor levels in epithelial cells.

**References**


**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.