Everolimus is an inhibitor of mammalian target of rapamycin 1 (mTOR1) that is used clinically for its immunosuppressive activity in renal transplant recipients and is currently in clinical trials exploring its anticancer chemotherapeutic activity. In nasopharyngeal carcinoma cells, everolimus induces apoptosis and autophagy, inhibiting cell growth. In esophageal cancer cells, everolimus decreases expression of mTOR targets p70S6K and S6, increasing cell damage and decreasing cell proliferation. In animal models of experimental autoimmune uveoretinitis (EAU), everolimus decreases levels of Th1, Th2, and Th17 cytokines and increases levels of Treg cells, attenuating disease pathology. Additionally, everolimus exhibits nephroprotective benefit at low doses, decreasing adriamycin-induced proteinuria and improving renal function in animal models of nephrotic syndrome.

References


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