



LKT Laboratories, Inc.

Everolimus

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID E8419

CAS No. 159351-69-6

Chemical Name

Synonym Certican

Formula $C_{53}H_{83}NO_{14}$

Formula Wt. 958.22

Melting Point 95-110°C

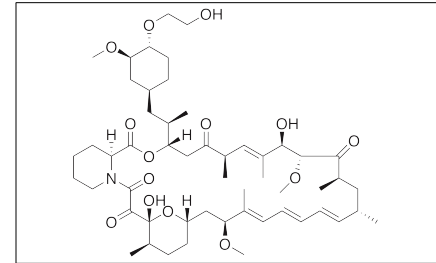
Purity ≥98%

Solubility Insoluble in water. Soluble in DMSO (30mg/mL), ethanol (7 mg/mL).

Store Temp Ambient

Ship Temp Ambient

Description 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.



Bulk quantities available upon request

Product ID	Size
E8419	1 mg
E8419	5 mg
E8419	25 mg

References Sendur MA, Zengin N, Aksoy S, et al. Everolimus: a new hope for patients with breast cancer. *Curr Med Res Opin.* 2014 Jan;30(1):75-87. PMID: 24050600.

Cai Y, Xia Q, Su Q, et al. mTOR inhibitor RAD001 (everolimus) induces apoptotic, not autophagic cell death, in human nasopharyngeal carcinoma cells. *Int J Mol Med.* 2013 Apr;31(4):904-12. PMID: 23426850.

Hennig M, Bauer D, Wasmuth S, et al. Everolimus improves experimental autoimmune uveoretinitis. *Exp Eye Res.* 2012 Dec;105:43-52. PMID: 23059401.

Ramadan R, Faour D, Awad H, et al. Early treatment with everolimus exerts nephroprotective effect in rats with adriamycin-induced nephrotic syndrome. *Nephrol Dial Transplant.* 2012 Jun;27(6):2231-41. PMID: 22036940.

Wang ZG, Fukazawa T, Nishikawa T, et al. RAD001 offers a therapeutic intervention through inhibition of mTOR as a potential strategy for esophageal cancer. *Oncol Rep.* 2010 Apr;23(4):1167-72. PMID: 20204306.

Kahan BD, Koch SM. Current immunosuppressant regimens: considerations for critical care. *Curr Opin Crit Care.* 2001 Aug;7(4):242-50. PMID: 11571421.

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