



# LKT Laboratories, Inc.

## 7-O-Desmethyl Rapamycin

Phone: 888-558-5227  
651-644-8424  
Fax: 888-558-7329  
Email: [getinfo@lctlabs.com](mailto:getinfo@lctlabs.com)  
Web: [lctlabs.com](http://lctlabs.com)

### Product Information

**Product ID** D183734

**CAS No.** 151519-50-5

**Chemical Name** 7-O-Desmethyl Rapamycin

**Synonym** 7-O-Desmethyl Sirolimus; 7-O-demethyl rapamycin; 7-O-Desmethyl Sirolimus; Novolimus

**Formula**  $C_{50}H_{77}NO_{13}$

**Formula Wt.** 900.15

**Melting Point**

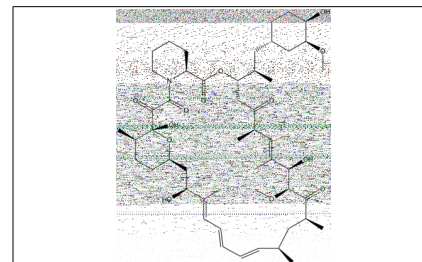
**Purity**  $\geq 85\%$

**Solubility**

**Store Temp**  $-80^{\circ}\text{C}$

**Ship Temp** Ambient

**Description** 7-O-Desmethyl Rapamycin is an impurity of rapamycin. 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  $\alpha$ -SMA, type III collagen, PDGF, and TGF- $\beta$ 1. Additionally, rapamycin increases connective tissue growth factor levels in epithelial cells.



### Pricing and Availability

**Bulk quantities available upon request**

Product ID	Size	List Price
D183734	2.5 mg	\$630.90
D183734	5 mg	\$1021.40
D183734	10 mg	\$1742.50
D183734	25 mg	\$3004.40

**References** Klintmalm GB, Nashan B. The Role of mTOR Inhibitors in Liver Transplantation: Reviewing the Evidence. J Transplant. 2014;2014:845438. PMID: 24719752.

Tian J, Wang Y, Zhou X, et al. Rapamycin slows IgA nephropathy progression in the rat. Am J Nephrol. 2014;39(3):218-29. PMID: 24603476.

Xu X, Wan X, Geng J, et al. Rapamycin regulates connective tissue growth factor expression of lung epithelial cells via phosphoinositide 3-kinase. Exp Biol Med (Maywood). 2013 Sep;238(9):1082-94. PMID: 23986222.

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