



LKT Laboratories, Inc.

EX-527

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Product Information

Product ID E9201

CAS No. 49843-98-3

Chemical Name

Synonym Selisistat

Formula $C_{13}H_{13}ClN_2O$

Formula Wt. 248.71

Melting Point

Purity $\geq 99\%$

Solubility DMSO 49 mg/mL (197.01 mM)

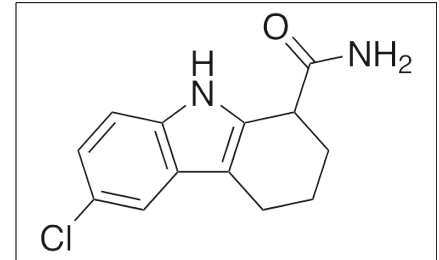
Ethanol 18 mg/mL (72.37 mM)

Water Insoluble

Store Temp $-20^{\circ}C$

Ship Temp Ambient

Description EX-527 is an inhibitor of sirtuin 1 (SIRT1); sirtuins are considered class III histone deacetylases (HDACs). EX-527 binds the NAD⁺ site of sirtuin 1, stabilizing a closed conformation. EX-527 exhibits immunostimulatory and anti-inflammatory activities. In animal models of autoimmune colitis and inflammatory bowel disease, EX-527 increases the number of Foxp3⁺ Treg cells and prevents weight loss. In animal models of polycystic kidney disease, this compound delays renal cyst formation and growth. Additionally, EX-527 improves myocardial histology and increases the number of Foxp3⁺ Treg cells in animal models of transplant surgery, prolonging allograft survival.



Bulk quantities available upon request

Product ID	Size
E9201	5 mg
E9201	25 mg

References Akimova T, Xiao H, Liu Y, et al. Targeting sirtuin-1 alleviates experimental autoimmune colitis by induction of Foxp3⁺ T-regulatory cells. *Mucosal Immunol.* 2014 Feb 19. [Epub ahead of print]. PMID: 24549276.

Gertz M, Fischer F, Nguyen GT, et al. Ex-527 inhibits Sirtuins by exploiting their unique NAD⁺-dependent deacetylation mechanism. *Proc Natl Acad Sci U S A.* 2013 Jul 23;110(30):E2772-81. PMID: 23840057.

Zhou X, Fan LX, Sweeney WE Jr, et al. Sirtuin 1 inhibition delays cyst formation in autosomal-dominant polycystic kidney disease. *J Clin Invest.* 2013 Jul 1;123(7):3084-98. PMID: 23778143.

Beier UH, Wang L, Bhatti TR, et al. Sirtuin-1 targeting promotes Foxp3⁺ T-regulatory cell function and prolongs allograft survival. *Mol Cell Biol.* 2011 Mar;31(5):1022-9. PMID: 21199917.

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