LKT Laboratories, Inc.

Empagliflozin

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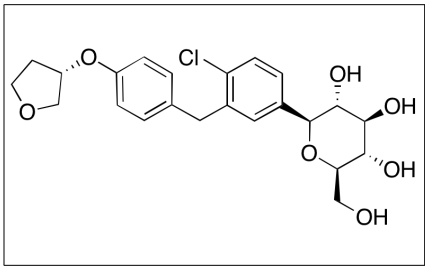
Product Information

Product ID E499601
CAS No. 864070-44-0
Chemical Name

Synonym

Formula $C_{23}H_{27}ClO_7$
Formula Wt. 450.91
Melting Point
Purity ≥98%
Solubility 30mg/mL in organic solvents such as ethanol, DMSO, and dimethyl formamide. Sparingly soluble in aqueous buffers.

Store Temp -20°C
Ship Temp Blue Ice



Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
E499601	5 mg	$44.10
E499601	10 mg	$77.20
E499601	50 mg	$193.00
E499601	100 mg	$297.70

Description Empagliflozin is a sodium glucose cotransporter 2 inhibitor. Chronic treatment of Zucker diabetic fatty rats with empagliflozin was able to prevent the development of oxidative stress, AGE/RAGE signaling and inflammation, and to partially improve endothelial function. High-dose treatment of C57BL/6J mice with empagliflozin resulted in suppressed weight gain in addition to ameliorating glucose intolerance and insulin resistance. Empagliflozin treatment also protected mice from diet-induced hepatic steatosis and inflammation, decreased M1 macrophages, and increased M2 macrophages. Additionally, empagliflozin treatment lowered blood glucose levels, improved cardiac function, improved histopathalogic changes in the myocardium, and inhibited cardiomyocyte apoptosis by down-regulating expression of CHOP and GRP8 and inactivating caspase-12 in diabetic cardiomyopathy rats.
TEST!!!!!!

References

Steven S, Oelze M, Hanf A, et al. The SGLT2 inhibitor empagliflozin improves the primary diabetic complications in ZDF rats. Redox Biol. 2017 Oct;13:370-385. PMID: 28667906.

Xu L, Nagata N, Nagashimada M, et al. SGLT2 inhibition by empagliflozin promotes fat utilization and browning and attenuates inflammation and insulin resistance by polarizing M2 macrophages in diet-induced obese mice. EBioMedicine. 2017 Jun;20:137-149. PMID: 28579299.

Zhou Y, Wu W. The sodium-glucose co-transporter 2 inhibitor, empagliflozin, protects against diabetic cardiomyopathy by inhibition of the endoplasmic reticulum stress pathway. Cell Physiol Biochem. 2017;41(6):2503-2512. PMID: 28472796.