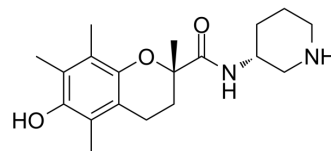


Sonlicromanol

Cat. No.:	HY-121577
CAS No.:	1541170-75-5
Molecular Formula:	C ₁₉ H ₂₈ N ₂ O ₃
Molecular Weight:	332.44
Target:	Reactive Oxygen Species
Pathway:	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Sonlicromanol (KH176) is an orally active reactive oxygen species (ROS) modulator for the study in mitochondrial disease ^[1] [2].									
In Vivo	<p>Sonlicromanol (KH176, 10 mg/kg, ip, twice daily) has promising, but independent and nonadditive, properties for the pharmacological treatment of CI-deficiency-related mitochondrial diseases^[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Ndufs4^{-/-} mice^[3].</td> </tr> <tr> <td>Dosage:</td> <td>10 mg/kg.</td> </tr> <tr> <td>Administration:</td> <td>Twice daily by intraperitoneal injection.</td> </tr> <tr> <td>Result:</td> <td>Increased lifespan of Ndufs4^{-/-} mice similar as KH176 and Clofibrate single treatment.</td> </tr> </table>		Animal Model:	Ndufs4 ^{-/-} mice ^[3] .	Dosage:	10 mg/kg.	Administration:	Twice daily by intraperitoneal injection.	Result:	Increased lifespan of Ndufs4 ^{-/-} mice similar as KH176 and Clofibrate single treatment.
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REFERENCES

- [1]. X Jiang, et al. Mechanism of action and potential applications of selective inhibition of microsomal prostaglandin E synthase-1-mediated PGE 2 biosynthesis by sonlicromanol's metabolite KH176m. *Sci Rep.* 2021 Jan 13;11(1):880.
- [2]. Zikai Feng, et al. Comparative In Vitro Toxicology of Novel Cytoprotective Short-Chain Naphthoquinones. *Pharmaceuticals (Basel)*. 2020 Aug 7;13(8):184.
- [3]. Sanne J C M Frambach, et al. Effects of clofibrate and KH176 on life span and motor function in mitochondrial complex I-deficient mice. *Biochim Biophys Acta Mol Basis Dis.* 2020 Jun 1;1866(6):165727.

Caution: Product has not been fully validated for medical applications. For research use only.

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