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Data Sheet

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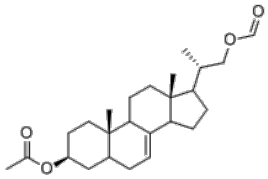
Product Name	:	DHCR24 inhibitor SH42
Cat. No.	:	PC-20955
CAS No.	:	2143952-36-5
Molecular Formula	:	$C_{25}H_{38}O_4$
Molecular Weight	:	402.58
Target	:	Other Targets
Solubility	:	10 mM in DMSO



CAS: 2143952-36-5

Biological Activity

DHCR24 inhibitor SH42 is a potent, selective, non-toxic delta 24-dehydrocholesterol reductase (**DHCR24**, Seladin-1) inhibitor, inhibits overall cholesterol biosynthesis in HL-60 cells with IC50 of 4.2 nM.
SH42 markedly increases liver desmosterol levels and ameliorates hepatic steatosis in 3L.CETP mice fed a high-fat high-cholesterol diet (HFCD).
SH42 prevents Kupffer cell activation and reduces immune cell infiltration into the liver, does not increase circulating lipids. The therapeutic effects of DHCR24 inhibition on hepatic steatosis are strictly dependent on LXRα, does affect circulating monocytes and neutrophils in LXRα-deficient mice.
SH42 reduces hepatic crown-like structures, liver collagen content, and plasma alanine transaminase levels in an established NAFLD model.

References

Muller C,et al. ***Eur J Med Chem*** 140: 305–320.

Zhou E, et al. ***EMBO Mol Med***. 2023 Jun 26:e16845.

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