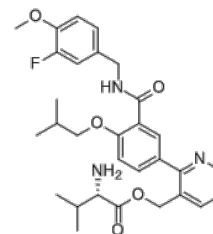


Product Name	: AD-9308
Cat. No.	: PC-21249
CAS No.	: 1804942-56-0
Molecular Formula	: C ₃₀ H ₃₆ FN ₃ O ₅
Molecular Weight	: 537.63
Target	: Aldehyde Dehydrogenase (ALDH)
Solubility	: 10 mM in DMSO



CAS: 1804942-56-0

Biological Activity

AD-9308 is a water-soluble, orally bioavailable, potent, and highly selective **ALDH2** activator, AD-9308 is a valine ester prodrug of a potent and selective small molecule ALDH2 activator AD-5591.

AD-5591 treatment increases the catalytic activity of recombinant wild-type and mutant human ALDH2 in vitro.

AD-9308 is rapidly converted to AD-5591 by esterase hydrolysis in vivo.

AD-9308 administration shows a favorable pharmacokinetic profile in mice when administered orally or intravenously with high bioavailability.

AD-9308 (20 mg/kg/day or 60 mg/kg/day, oral gavage for 20 weeks) lowered 4-HNE and attenuated diet-induced obesity, fatty liver, insulin resistance, and glucose intolerance in both WT and Aldh2 KI mice, ameliorated diet-induced insulin resistance and glucose intolerance.

References

Chang YC, et al. *Nat Commun*. 2023 Sep 25;14(1):5971.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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