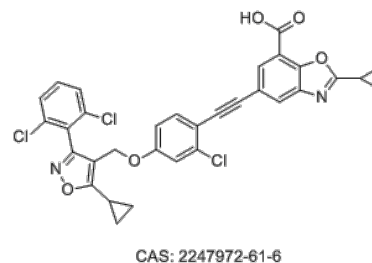


Product Name : ID166
Cat. No. : PC-21879
CAS No. : 2247972-61-6
Molecular Formula : C₃₂H₂₁Cl₃N₂O₅
Molecular Weight : 619.88
Target : Farnesoid X Receptor (FXR)
Solubility : 10 mM in DMSO



Biological Activity

Lecufexor (D119031166, ID166) is a novel potent, selective farnesoid X receptor (**FXR**) agonist with EC₅₀ of 3 nM and 5 nM in TR-FRET FXR co-activator assay and FXR reporter assay, respectively.

ID166 induces SHP gene expression more strongly than obeticholic acid (OCA) (EC₅₀ of 1 μM) with an EC₅₀ value of 19 nM in human hepatocytes.

ID166 is highly selective for FXR against a luciferase reporter assay on 19 human nuclear receptors up to 3 μM, also does not exhibit agonistic activities on either MRGPRX4 or TGR5 up to 100 μM.

ID166 strongly increases the gene expression levels of the FXR target genes up to 14-fold in hamster liver and intestine in a dose-dependent manner, and plasma fibroblast growth factor 15 (FGF15) level is significantly increased by ID166 at a dose of 20 mg/kg/day.

ID166 (30 mg/kg) ameliorates the NASH phenotype induced by the fed free choice diet.

ID166 reduces total NAFLD activity and hepatic fibrosis score in NASH hamsters fed a free choice diet, modulates the relative abundance of gut microbes in NASH hamsters.

References

Moon AN, et al. *Biomed Pharmacother.* 2024 Feb 29;173:116331.

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

E-mail: tech@probechem.com