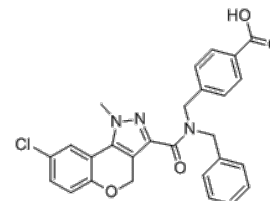


Product Name : Nidufexor
Cat. No. : PC-61390
CAS No. : 1773489-72-7
Molecular Formula : C₂₇H₂₂ClN₃O₄
Molecular Weight : 487.94
Target : Farnesoid X Receptor (FXR)
Solubility : 10 mM in DMSO



1. Chianelli D, et al. *J Med Chem.* 2020 Apr 23;63(8):3868-3880.

Biological Activity

Nidufexor (LMB763, LMB-763) is a potent, selective, non-bile acid partial agonist of **farnesoid X receptor (FXR)** with EC₅₀ of 7 nM in FXR-HTRF biochemical assay measuring the ligand-induced interaction between FXR and the Steroid Receptor Coactivator-1 (SRC1).

Nidufexor (LMB763) displays no activation of other nuclear receptors such as AR, ERα, GR, PPARγ, PR, or PXR using a TR-FRET assay (EC₅₀ > 30 μM) and no activation of RXR, LXR, GR, PPARγ, or ERα using a cell-based agonist assay (EC₅₀ > 10 μM).

Nidufexor (LMB763) exhibits EC₅₀ of 32 nM in cell-based FXR BSEP-luciferase reporter assays.

Nidufexor (LMB763) induces BSEP mRNA levels ~3.7-fold compared to DMSO control, in rat primary hepatocytes, which is 100-fold lower potency than tropifexor.

Nidufexor (LMB763) (1.5 mg/kg, oral gavage, once daily for 14 days) exhibits statistically significant 3.5-fold increase in serum FGF15 protein levels in Han-Wistar rats.

Nidufexor (LMB763) (3, 10, 30 mg/kg) reduces NASH activity scores and limits liver fibrosis in NASH murine model.

References

