PRODUCT INFORMATION



Lanifibranor

Item No. 25572

CAS Registry No.: 927961-18-0

Formal Name: 1-(6-benzothiazolylsulfonyl)-5-

chloro-1H-indole-2-butanoic acid

Synonym: **IVA337**

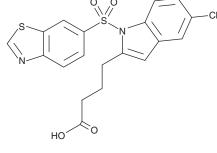
MF: C₁₉H₁₅CIN₂O₄S₂

434.9 FW: **Purity:** ≥98%

 λ_{max} : 223, 262 nm UV/Vis.: Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



Laboratory Procedures

Lanifibranor is supplied as a crystalline solid. A stock solution may be made by dissolving the lanifibranor in the solvent of choice, which should be purged with an inert gas. Lanifibranor is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of lanifibranor in ethanol is approximately 0.2 mg/ml and approximately 50 mg/ml in DMSO and DMF.

Lanifibranor is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, lanifibranor should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Lanifibranor has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Lanifibranor is an agonist of peroxisome proliferator-activated receptors (PPARs) with EC₅₀ values of 1,537, 866, and 206 nM for human recombinant PPARα, PPARβ, and PPARγ, respectively, for transactivation activity. It increases β-oxidation in Huh-7 and C2C12 cells when used at concentrations of 1 and 3 μM, respectively, and increases the expression of the PPARγ target genes adipocyte protein 2 (aP2) and adiponectin in adipocytes. Lanifibranor reduces plasma glucose and triglyceride levels in a db/db mouse model of type 2 diabetes when administered at doses of 10 and 30 mg/kg for five days. It also increases plasma adiponectin levels and decreases collagen deposition in a carbon tetrachloride-induced mouse model of non-alcoholic steatohepatitis (NASH).

Reference

1. Boubia, B., Poupardin, O., Barth, M., et al. Design, synthesis, and evaluation of a novel series of indole sulfonamide peroxisome proliferator activated receptor (PPAR) $\alpha/\gamma/\delta$ triple activators: Discovery of lanifibranor, a new antifibrotic clinical candidate. J. Med. Chem. 61(6), 2246-2265 (2018).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM