

PRODUCT INFORMATION



ZLY032

Item No. 31485

CAS Registry No.: 2314465-67-1
Formal Name: (3S)-2,3-dihydro-6-[[4-methyl-2-[4-(trifluoromethyl)phenyl]-5-thiazolyl]methoxy]-3-benzofuranacetic acid

MF: C₂₂H₁₈F₃NO₄S

FW: 449.4

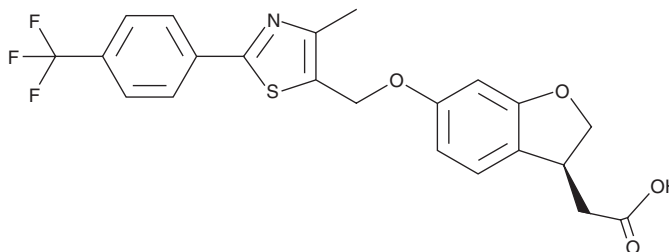
Purity: ≥98%

UV/Vis.: λ_{max}: 308 nm

Supplied as: A solid

Storage: -20°C

Stability: ≥2 years



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

Laboratory Procedures

ZLY032 is supplied as a solid. A stock solution may be made by dissolving the ZLY032 in the solvent of choice, which should be purged with an inert gas. ZLY032 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of ZLY032 in these solvents is approximately 30 mg/ml.

ZLY032 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ZLY032 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ZLY032 has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

ZLY032 is a dual agonist of free fatty acid receptor 1 (FFAR1/GPR40; EC₅₀ = 68 nM in a FLIPR assay) and peroxisome proliferator-activated receptor δ (PPARδ; EC₅₀ = 102 nM in a reporter assay).¹ It is selective for FFAR1 and PPARδ over PPARα and PPARγ (EC₅₀s = >10 μM for both). ZLY032 (40 mg/kg, twice per day) reduces blood glucose levels in an oral glucose tolerance test and decreases plasma total cholesterol and triglyceride levels in the *ob/ob* mouse model of metabolic disease.² It reduces hepatic steatosis and plasma alanine transaminase (ALT) and aspartate aminotransferase (AST) levels in a mouse model of non-alcoholic steatohepatitis (NASH) induced by a methionine and choline-deficient diet at the same dose.

References

1. Li, Z., Chen, Y., Zhou, Z., *et al.* Discovery of first-in-class thiazole-based dual FFA1/PPARδ agonists as potential anti-diabetic agents. *Eur. J. Med. Chem.* **164**, 352-365 (2019).
2. Li, Z., Zhou, Z., Hu, L., *et al.* ZLY032, the first-in-class dual FFA1/PPARδ agonist, improves glucolipid metabolism and alleviates hepatic fibrosis. *Pharmacol Res.* **159**, 105035 (2020).

WARNING

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

SAFETY DATA

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.

WARRANTY AND LIMITATION OF REMEDY

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