

PRODUCT INFORMATION



RB394

Item No. 18909

CAS Registry No.: 1830320-32-5
Formal Name: α -ethyl-4-[[[4-methoxy-2-(trifluoromethyl)phenyl]methyl]amino]carbonyl]-benzenepropanoic acid

MF: C₂₁H₂₂F₃NO₄

FW: 409.4

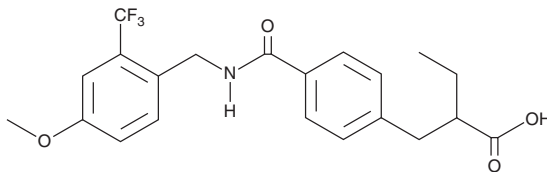
Purity: $\geq 98\%$

UV/Vis.: λ_{max} : 232, 280 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly



Laboratory Procedures

RB394 is supplied as a crystalline solid. A stock solution may be made by dissolving the RB394 in the solvent of choice. RB394 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of RB394 in these solvents is approximately 5, 33, and 25 mg/ml, respectively.

RB394 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, RB394 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. RB394 has a solubility of approximately 0.04 mg/ml in a 1:20 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

RB394 is an orally bioavailable, dual modulator of soluble epoxide hydrolase (sEH) and PPAR γ that inhibits sEH with an IC₅₀ of 0.33 μM and activates PPAR γ with an EC₅₀ of 0.3 μM .¹ It is inactive at PPAR δ and shows 29% activation of PPAR α , relative to control, at 10 μM .¹ RB394 is water soluble, orally bioavailable, and can be delivered through drinking water. In a two week *in vivo* pharmacokinetic study in mice, 30 mg/kg body weight in drinking water resulted in a final plasma concentration of $\sim 3 \mu\text{M}$.¹ This coincided with upregulation of PPAR γ target genes, as well as PPAR α and PPAR δ , in mouse livers.¹

Reference

1. Blöcher, R., Lamers, C., Wittman, S.K., *et al.* N-benzylbenzamides: A novel merged scaffold for orally available dual soluble epoxide hydrolase/peroxisome proliferator-activated receptor γ modulators. *J. Med. Chem.* **59**(1), 61-81 (2016).

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.

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