Product Data Sheet

Product Name: ALOX5 stabilizer-1 TFA
Cat. No.: GC79757

Chemical Properties

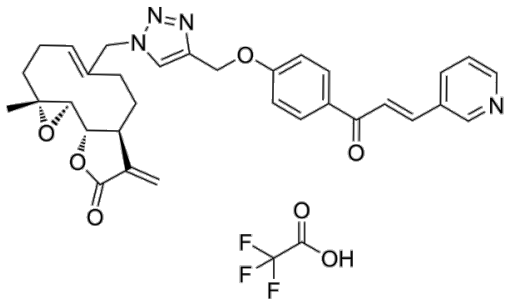
Cas. No.

Formula	$C_{34}H_{33}F_3N_4O_7$	M.Wt	666.64
Solubility		Storage	Store at 4°C, away from moisture and light

General tips: For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.

Shipping Condition: Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



Background

ALOX5 stabilizer-1 TFA is an arachidonate 5-lipoxygenase (ALOX5) stabilizer with a K d of 7.26 μM. ALOX5 stabilizer-1 TFA inhibits β-catenin protein levels and then suppresses STAT3 signal pathway. ALOX5 stabilizer-1 TFA induces lung cancer cells apoptosis, inhibited cell migration and proliferation. ALOX5 stabilizer-1 TFA can used for the study of non-small cell lung cancer (NSCLC) [1].

In Vitro, ALOX5 stabilizer-1 (Compound 10d) (72 h) TFA inhibits NCI-H820 cell proliferation with an IC_{50} of 0.11 μM and shows weaker toxicity against 3T3 cells with an IC_{50} of 0.48 μM [1]. ALOX5

stabilizer-1 (0-0.2 μM, 10 d) TFA inhibits colony formation of with NCI-H820 cells a dose-dependent manner[1]. ALOX5 stabilizer-1 (0-0.2 μM, 48 h) TFA inhibits NCI-H820 cell migration and induces cell apoptosis[1]. ALOX5 stabilizer-1 (0-0.2 μM, 48 h) TFA directly targets ALOX5 protein and enhances protein stability, then inhibites β-catenin protein levels and eventually suppressed STAT3 signal pathway in NCI-H820 cells[1].

References:

[1]. Bai Y, et al. Design, synthesis and bioactivity evaluation of parthenolide-chalcone hybrids as potential anti-lung cancer agents. Bioorg Chem. 2025 Jul 26;164:108808.

Caution: Product has not been fully validated for medical applications. For research use only.
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