PRODUCT INFORMATION

CAY10706
Item No. 19318

CAS Registry No.: 1881270-27-4
Formal Name: (1E,4E)-1-(4-hydroxy-3-methoxy phenyl)-5-(3,5,6-trimethyl-2-pyrazinyl)-1,4-pentadien-3-one
MF: C_{19}H_{20}N_{2}O_{3}
FW: 324.4
Purity: ≥95%
UV/Vis.: λ_{max}: 384 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

CAY10706 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10706 in the solvent of choice. CAY10706 is soluble in dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of CAY10706 in DMF is approximately 1 mg/ml.

CAY10706 is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

CAY10706 is a ligustrazine-curcumin hybrid that promotes intracellular reactive oxygen species accumulation preferentially in lung cancer cells.\textsuperscript{1} It has been shown to inhibit the proliferation of drug-sensitive (A549 (IC_{50} = 2.19 µM), SPC-A-1 (IC_{50} = 3.12 µM), LTEP-G-2 (IC_{50} = 2.88 µM)) and drug-resistant (A549/DDP (IC_{50} = 0.6 µM)) lung cancer cells but demonstrates little effect on non-tumor lung epithelial-like cells (HBE (IC_{50} = 21.34 µM)).\textsuperscript{1} CAY10706 can suppress the thioredoxin reductase system and inhibit the NF-κB, Akt, and ERK signaling.\textsuperscript{1}

Reference