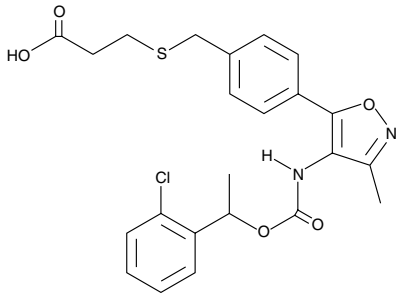
Product Information

Ki16425

Item No. 10012659

CAS Registry No.: 355025-24-0
Formal Name: 3-[[[4-[4-[[[1-(2-chlorophenyl)ethoxy]carbonyl]amino]-3-methyl-5-isoxazoly]phenyl]methyl]thio]-propanoic acid
MF: $C_{23}H_{23}ClN_2O_5S$
FW: 475.0
Purity: ≥95%
Stability: ≥1 year at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 276 nm



Laboratory Procedures

For long term storage, we suggest that Ki16425 be stored as supplied at -20°C. It should be stable for at least one year.

Ki16425 is supplied as a crystalline solid. A stock solution may be made by dissolving the Ki16425 in an organic solvent purged with an inert gas. Ki16425 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of Ki16425 in these solvents is approximately 10 mg/ml.

Ki16425 is sparingly soluble in aqueous buffers. Ki16425 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Ki16425 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.

Lysophosphatidic acid (LPA) is a bioactive lipid mediator that signals through five distinct G protein-coupled receptors (LPA_{1-5}).[1] Ki16425 is a LPA receptor antagonist with selectivity for LPA_1 and LPA_3. It exhibits K_i values of 0.34, 6.5, and 0.93 µM for the human LPA_1, LPA_2, and LPA_3 receptors, respectively, as determined by measuring inositol phosphate production in RH7777-transfected cells.[2] Ki1642, at 10 µM, significantly blocks the response of a variety of cancer cell lines to LPA-induced cell migration.[3]

References

1. Choi, J.W., Lee, C.-W., and Chun, J. Biological roles of lysophospholipid receptors revealed by genetic null mice: An update. *Biochim. Biophys. Acta* **1781**, 531-539 (2008)
2. Ohta, H., Sato, K., Murata, N., *et al.* Ki16425, a subtype-selective antagonist for EDG-family lysophosphatidic acid receptors. *Mol. Pharmacol.* **64(4)**, 994-1005 (2003).
3. Yamada, T., Sato, K., Komachi, M., *et al.* Lysophosphatidic acid (LPA) in malignant ascites stimulates motility of human pancreatic cancer cells through LPA. *J. Biol. Chem.* **279(8)**, 6595-6605 (2004).

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