

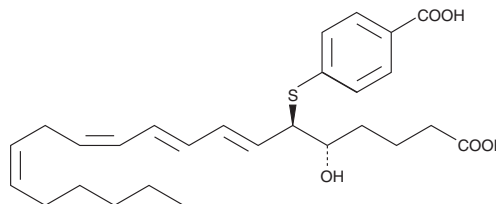
PRODUCT INFORMATION



BAY u9773

Item No. 70770

CAS Registry No.: 154978-38-8
Formal Name: 4-[[[(1R,2E,4E,6Z,9Z)-1-[(1S)-4-carboxy-1-hydroxybutyl]-2,4,6,9-pentadecatetraenyl]thio]-benzoic acid
MF: C₂₇H₃₆O₅S
FW: 472.6
Purity: ≥95%
Stability: ≥1 year at -80°C
Supplied as: A solution in ethanol
UV/Vis.: λ_{max}: 279 nm



Laboratory Procedures

For long term storage, we suggest that BAY u9773 be stored as supplied at -80°C. It should be stable for at least one year.

BAY u9773 is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of BAY u9773 in these solvents is approximately 25 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of BAY u9773 is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of BAY u9773 in PBS (pH 7.2) is approximately 0.15 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

The biological effects of the cysteinyl leukotrienes (cysLTs, including LTC₄, LTD₄, and LTE₄) are transduced mainly by a pair of 7-transmembrane receptors, CysLT₁ and CysLT₂.¹⁻³ BAY u9773 is a non-selective antagonist of the CysLT receptors, having about the same IC₅₀ (20-80 nM) for the inhibition of LT responses in a variety of tissue preparations containing either/or both receptors.⁴ In contrast, many of the commercially developed CysLT₁ receptor antagonists (pranlukast or montelukast) antagonize only CysLT₁ receptors. BAY u9773 is thus one of the only available tools for blocking CysLT₂ receptors.

References

1. Lynch, K.R., O'Neill, G.P., Liu, Q., *et al.* Characterization of the human cysteinyl leukotriene CysLT₁ receptor. *Nature* **399**, 789-793 (1999).
2. Heise, C.E., O'Dowd, B.F., Figueroa, D.J., *et al.* Characterization of the human cysteinyl leukotriene 2 receptor. *J. Biol. Chem.* **275**, 30531-30536 (2000).
3. Ogasawara, H., Ishii, S., Yokomizo, T., *et al.* Characterization of mouse cysteinyl leukotriene receptors mCysLT₁ and mCysLT₂. Differential pharmacological properties and tissue distribution. *J. Biol. Chem.* **277**(21), 18763-18768 (2002).
4. Tudhope, S.R., Cuthbert, N.J., Abram, T.S., *et al.* BAY u9773, a novel antagonist of cysteinyl-leukotrienes with activity against two receptor subtypes. *Eur. J. Pharmacol.* **264**, 317-323 (1994).

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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