Product Data Sheet

Product Name: BAY-u 9773
Cat. No.: GC10266

Chemical Properties

Cas. No.	154978-38-8		
Chemical Name	4-(((4S,5R,6E,8E,10E,13E)-1-carboxy-4-hydroxynonadeca-6,8,10,13-tetraen-5-yl)thio)benzoic acid		
SMILES	O[C@H]([C@@H](/C=C/C=C/C=C/C/C=C/CCCCC)SC1=CC=C(C(O)=O)C=C1)CCCC(O)=O		
Formula	$C_{27}H_{36}O_5S$	M.Wt	472.64
Solubility	DMF: 25 mg/ml,DMSO: 25 mg/ml,Ethanol: 25 mg/ml,PBS (pH 7.2): .15 mg/ml	Storage	Store at -80°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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	BAY-u 9773		

Background

BAY-u9773, an antagonist of cysteinyl leukotriene (Cys-LT) receptor, which have equal affinity towards CysLT1 and CysLT2 receptors.

The Cys-LTs are a family of potent bioactive lipids, acting through two distinct G protein-coupled receptors named the CysLT1 and CysLT2 receptors.

To determine the profile of BAY-u9773 as a Cys-LT receptor antagonist, the effect of this component on different smooth muscle preparations was investigated. The result showed that BAY u9773 antagonised 'typical' cysteinyl-leukotriene receptors and inhibited bronchial and venous muscle contractions in the human muscle preparations [1].

BAY-u9773 was also extensively used in animal model to study the function of CysLT1

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and CysLT2 receptors. For instance, BAY-u9773 treatment inhibited the infiltration of eosinophil in BAL Fluid in a model of OVA-induced airway hypersensitivity and inflammation in guinea pigs [2]. In addition, this components was shown to act as competitive antagonist towards LTC4 and LTE4 receptors and results in contractions in trachea of guinea pig models [3].

References:

1. Tudhope SR, Cuthbert NJ, Abram TS, Jennings MA, Maxey RJ, Thompson AM, et al. BAY u9773, a novel antagonist of cysteinyl-leukotrienes with activity against two receptor subtypes. Eur J Pharmacol 1994,264:317-323.
2. Muraki M, Imbe S, Santo H, Sato R, Sano H, Iwanaga T, et al. Effects of a cysteinyl leukotriene dual 1/2 receptor antagonist on antigen-induced airway hypersensitivity and airway inflammation in a guinea pig asthma model. Int Arch Allergy Immunol 2011,155 Suppl 1:90-95.
3. Wikstrom Jonsson E, Rosenqvist U, Dahlen SE. Agonist and antagonist activities of the leukotriene analogue BAY u9773 in guinea pig lung parenchyma. Eur J Pharmacol 1998,357:203-211.

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