Product Data Sheet

Product Name: BayCysLT2
Cat. No.: GC13020

Chemical Properties

Cas. No.	712313-33-2		
Chemical Name	3-[[(3-carboxycyclohexyl)amino]carbonyl]-4-[3-[4-(4-phenoxybutoxy)phenyl]propoxy]-benzoic acid		
SMILES	O=C(NC1CCCC(C(O)=O)C1)C2=CC(C(O)=O)=CC=C2OCCCC(C=C3)=CC=C3OCCCCOC4=CC=CC=C4		
Formula	$C_{34}H_{39}NO_8$	M.Wt	589.7
Solubility	≤20mg/ml in DMSO;20mg/ml in dimethyl formamide	Storage	Store at -20°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	BayCysLT2		

Background

BayCysLT2, an isophthalic acid derivative, is a selective and potent CysLT2 receptor antagonist [1].

Cysteinyl leukotrienes (CysLTs) belong to a family of G protein-coupled receptors (GPCRs). The cysteinyl leukotrienes (CysLTs) are inflammatory mediators associated with neuronal injury after brain ischemia through the activation of their receptors, CysLT1R and CysLT2R [2].

In vitro: BayCysLT2 inhibited radioligand binding of LTD4 to CysLT2 and CysLT1 receptor cell lines with IC50 values of 35 and >10,000 nM, respectively [1]. BayCysLT2 reversed LTC4-stimulated perfusion pressure increase and contractility decrease in isolated Langendorff-perfused guinea pig hearts in a concentration-dependent manner [1]. BayCysLT2 protected astrocytes from ischemic injury [3].

In vivo: BayCysLT2 attenuated myocardial infarction damage but also inhibited LTD4-induced Evans blue dye leakage in the mouse ear vasculature [4].

References:
[1] M. Harter, J. Erguden, F. Wunder, et al. Isophtalic acid derivatives. 10/537,623, 1-104 (2006).
[2] Takasaki J, Kamohara M, Matsumoto M, et al. The molecular characterization and tissue distribution of the human cysteinyl leukotriene CysLT 2 receptor[J]. Biochemical and biophysical research communications, 2000, 274(2): 316-322.
[3] X. J. Huang, W.P. Zhang, C.T. Li, W.Z. Shi, S.H. Fang, Y.B. Lu, Z. Chen, E.Q. Wei. Activation of CysLT receptors induces astrocyte proliferation and death after oxygen–glucose deprivation. Glia, 56 (2008), pp. 27–37
[4] N. C. Ni, D. Yan, L.L. Ballantyne, A. Barajas-Espinosa St, T. Amand, D.A. Pratt, C.D. Funk. A selective cysteinyl leukotriene receptor 2 antagonist blocks myocardial ischemia/reperfusion injury and vascular permeability in mice. J. Pharmacol. Exp. Ther., 339 (2011), pp. 768–778

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA