

Product Data Sheet

Product Name: Iralukast (CGP 45715A)

Cat. No.: GC31986

Chemical Properties

Cas. No. 151581-24-7

SMILES O=C(C1=CC(C2=CC=C(S[C@H]([C@H](O)C3=CC=CC(C(F)(F)F)=C3)/C=C/C=C\CCCCOC4=CC=C(C(C)=O)C(O)=C4CCC)C=C2O1)=O)O

Formula $C_{38}H_{37}F_3O_8S$ M.Wt 710.76

Solubility Soluble in DMSO Storage Store at $-20^{\circ}C$

General tips For obtaining a higher solubility, please warm the tube at $37^{\circ}C$ and shake it in the ultrasonic bath for a while. Stock solution can be stored below $-20^{\circ}C$ 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

Background

Iralukast is a cysteinyl-leukotriene antagonist (CysLT) with a pK_i of 7.8 for CysLT1.

Both Iralukast and CGP 57698 are able to compete for the two sites labelled by [3H]-LTD4. As in all the G-protein coupled receptors, Iralukast and CGP 57698 do not discriminate between the high and the low affinity states of the CysLT receptor labelled by LTD4 ($K_{i1}=K_{i2}=16.6\text{ nM}\pm 36\% \text{ CV}$ and $K_{i1}=K_{i2}=5.7\text{ nM}\pm 19\% \text{ CV}$, respectively). Iralukast displays a slow binding kinetic, because preincubation (15 min) increases its antagonist potency. Iralukast and CGP 57698 antagonize LTD4-induced contraction of human bronchi, with pA_2 values of $7.77\pm 4.3\% \text{ CV}$ and $8.51\pm 1.6\% \text{ CV}$, respectively, and slopes not significantly different from unity [2].

[1]. Magnus B?ck, et al. Update on leukotriene, lipoxin and oxoeicosanoid receptors: IUPHAR Review 7. Br J Pharmacol. 2014 Aug; 171(15): 3551-3574. [2]. Val?rie Capra, et al. Pharmacological characterization of the cysteinyl-leukotriene antagonists CGP 45715A (iralukast) and CGP 57698 in human airways in vitro. Br J Pharmacol. 1998 Feb; 123(3): 590-598.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA