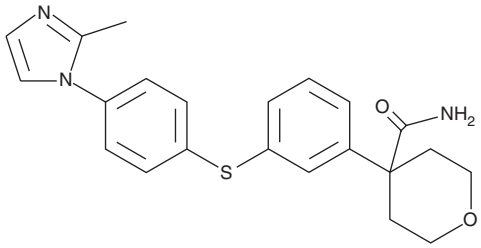
PRODUCT INFORMATION

CJ-13610

Item No. 21764

CAS Registry No.:	179420-17-8
Formal Name:	tetrahydro-4-[3-[[4-(2-methyl-1H-imidazol-1-yl) phenyl]thio]phenyl]-2H-pyran-4-carboxamide
MF:	$C_{22}H_{23}N_3O_2S$
FW:	393.5
Purity:	≥98%
UV/Vis.:	λ_{max}: 258 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

CJ-13610 is supplied as a crystalline solid. A stock solution may be made by dissolving the CJ-13610 in the solvent of choice, which should be purged with an inert gas. CJ-13610 is soluble in organic solvents such as ethanol and DMSO. The solubility of CJ-13610 in these solvents is approximately 1 and 10 mg/ml, respectively.

Description

CJ-13610 is an inhibitor of 5-lipoxygenase (5-LO) that inhibits 5-LO product formation in human polymorphonuclear leukocytes (PMNLs) challenged with A23187 (Item No. 11016) *in vitro* (IC_{50} = 70 nM).[1] It inhibits recombinant 5-LO in a glutathione peroxidase-dependent manner (IC_{50} = 300 nM). CJ-13610 also inhibits 5-LO product formation induced by phosphorylation in PMNLs and HeLa cells. *In vivo*, CJ-13610 (3-10 mg/kg) reduces levels of leukotriene B_4 (LTB_4; Item No. 20110) and decreases mechanical hyperalgesia in a rat model of chronic inflammatory pain induced by Freund's adjuvant.[2] It also reverses tactile allodynia and increases hind paw weight bearing in a rat medial meniscal transection model of osteoarthritic pain when administered at doses ranging from 0.6 to 6 mg/kg.

References

1. Fischer, L., Steinhilber, D., and Werz, O. Molecular pharmacological profile of the nonredox-type 5-lipoxygenase inhibitor CJ-13,610. *Br. J. Pharmacol.* **142(5)**, 861-868 (2004).
2. Cortes-Burgos, L.A., Zweifel, B.S., Settle, S.L., *et al.* CJ-13610, an orally active inhibitor of 5-lipoxygenase is efficacious in preclinical models of pain. *Eur. J. Pharmacol.* **617(1-3)**, 59-67 (2009).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM