

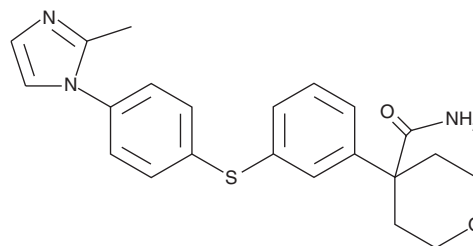
# PRODUCT INFORMATION



## 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<sub>22</sub>H<sub>23</sub>N<sub>3</sub>O<sub>2</sub>S  
**FW:** 393.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 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<sub>50</sub> = 70 nM).<sup>1</sup> It inhibits recombinant 5-LO in a glutathione peroxidase-dependent manner (IC<sub>50</sub> = 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<sub>4</sub> (LTB<sub>4</sub>; Item No. 20110) and decreases mechanical hyperalgesia in a rat model of chronic inflammatory pain induced by Freund's adjuvant.<sup>2</sup> 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).

#### 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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