

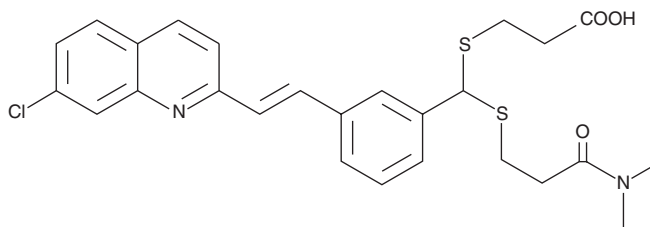
# PRODUCT INFORMATION



## MK-571

Item No. 10029

**CAS Registry No.:** 115104-28-4  
**Formal Name:** 3-[[[3-[(1E)-2-(7-chloro-2-quinolinyl)ethenyl]phenyl]thio]methyl]thio]-propanoic acid  
**Synonym:** L-660,711  
**MF:** C<sub>26</sub>H<sub>27</sub>ClN<sub>2</sub>O<sub>3</sub>S<sub>2</sub>  
**FW:** 515.1  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 226, 283, 327, 344, 357 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

MK-571 is supplied as a crystalline solid. A stock solution may be made by dissolving the MK-571 in the solvent of choice, which should be purged with an inert gas. MK-571 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of MK-571 in ethanol is approximately 1 mg/ml and approximately 10 mg/ml in DMSO and DMF.

### Description

MK-571 is a selective, orally active CysLT<sub>1</sub> receptor antagonist.<sup>1</sup> It blocks the binding of LTD<sub>4</sub>, but not LTC<sub>4</sub>, to human and guinea pig lung membranes with K<sub>i</sub> values of 0.22 nM and 2.1 nM, respectively, which is indicative of CysLT<sub>1</sub> receptor-mediated activity in these preparations.<sup>1</sup> MK-571 effectively blocks LTD<sub>4</sub> activation of recombinant human and murine CysLT<sub>1</sub> receptors<sup>2,3</sup> but is ineffective at blocking LTC<sub>4</sub> or LTD<sub>4</sub> activation of the recombinant human or murine CysLT<sub>2</sub> receptors.<sup>3,4</sup>

### References

1. Jones, T.R., Zamboni, R., Belley, M., *et al.* Pharmacology of L-660,711 (MK-571): A novel potent and selective leukotriene D<sub>4</sub> receptor antagonist. *Can. J. Physiol. Pharmacol.* **67(1)**, 17-28 (1989).
2. Lynch, K.R., O'Neill, G.P., Liu, Q., *et al.* Characterization of the human cysteinyl leukotriene CysLT<sub>1</sub> receptor. *Nature* **399(6738)**, 789-793 (1999).
3. Ogasawara, H., Ishii, S., Yokomizo, T., *et al.* Characterization of mouse cysteinyl leukotriene receptors mCysLT<sub>1</sub> and mCysLT<sub>2</sub>. Differential pharmacological properties and tissue distribution. *J. Biol. Chem.* **277(21)**, 18763-18768 (2002).
4. Heise, C.E., O'Dowd, B.F., Figueroa, D.J., *et al.* Characterization of the human cysteinyl leukotriene 2 receptor. *J. Biol. Chem.* **275(39)**, 30531-30536 (2000).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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