

# **Certificate of Analysis**

Print Date: Mar 31st 2025

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Product Name: MK 571 Catalog No.: 2338 Batch No.: 3

CAS Number: 115104-28-4

IUPAC Name: 3-[[[3-[(1*E*)-2-(7-Chloro-2-quinolinyl)ethenyl]phenyl][[3-(dimethylamino)-3-oxopropyl]thio]methyl]thio]propanoic acid

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{26}H_{27}CIN_2O_3S_2$ 

Batch Molecular Weight: 515.09

Physical Appearance: Off White solid
Solubility: DMSO to 100 mM
Storage: Store at -20°C

**Batch Molecular Structure:** 

$$HO_2C$$
  $S$   $O$   $N$ 

## 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.36$  (Chloroform:Methanol [9:1])

**HPLC:** Shows 98.0% purity

<sup>1</sup>H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 60.63 5.28 5.44 Found 60.63 5.32 5.51

## **Product Information**

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## **Description:**

MK 571 is a potent CysLT<sub>1</sub> (LTD<sub>4</sub>) leukotriene receptor inverse agonist (EC<sub>50</sub> = 1.3 nM). Antagonizes LTD<sub>4</sub>-induced contractions of guinea pig trachea and ileum (pA<sub>2</sub> values are 9.4 and 10.5 respectively). Also inhibitor of multidrug resistance protein-1 (MRP1) mediated transport; in vitro augments the effects of cytotoxic agents on malignant cells.

## **Physical and Chemical Properties:**

Batch Molecular Formula:  $C_{26}H_{27}CIN_2O_3S_2$ 

Batch Molecular Weight: 515.09 Physical Appearance: Off White solid

## Minimum Purity: ≥98%

## **Batch Molecular Structure:**

$$HO_2C$$

Storage: Store at -20°C

## Solubility & Usage Info:

DMSO to 100 mM

#### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

## References:

**Dupre** et al (2004) Inverse agonist activity of selected ligands of the cysteinyl-leukotriene receptor 1. J.Pharmacol.Exp.Ther. **309** 102. PMID: 14718577.

**Blain and Sirois** (2000) Involvement of LTD4 in allergic pulmonary inflammation in mice: modulation by cysLT<sub>1</sub> antagonist MK-571. Prost.Leuko.Essent.Fatty Acids **62** 361.

**Vellenga** *et al* (1999) Interleukin-6 production by activated human monocytic cells is enhanced by MK-571, a specific inhibitor of the multi-drug resistance protein-1. Br.J.Pharmacol. **127** 441. PMID: 10385244.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use