

# Certificate of Analysis

**Product Name:** Trovafloxacin mesylate

**Catalog No.:** 3863

**Batch No.:** 1

CAS Number: 147059-75-4

IUPAC Name: 7-[(1 $\alpha$ ,5 $\alpha$ ,6 $\alpha$ )-6-Amino-3-azabicyclo[3.1.0]hex-3-yl]-1-(2,4-difluorophenyl)-6-fluoro-1,4-dihydro-4-oxo-1,8-naphthyridine-3-carboxylic acid mesylate

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>20</sub>H<sub>15</sub>F<sub>3</sub>N<sub>4</sub>O<sub>3</sub>·CH<sub>3</sub>SO<sub>3</sub>H

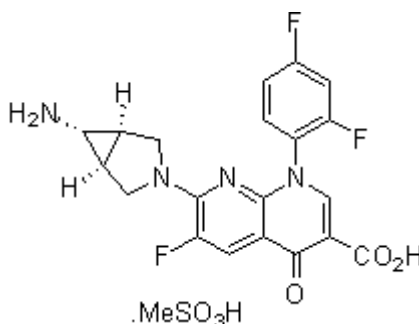
**Batch Molecular Weight:** 512.46

**Physical Appearance:** White solid

**Solubility:** water to 50 mM  
DMSO to 100 mM

**Storage:** Desiccate at RT

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99.1% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	49.22	3.74	10.93
Found	49.25	3.77	10.95

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

**Product Name:** Trovafloxacin mesylate

**Catalog No.:** 3863

**Batch No.:** 1

CAS Number: 147059-75-4

IUPAC Name: 7-[(1 $\alpha$ ,5 $\alpha$ ,6 $\alpha$ )-6-Amino-3-azabicyclo[3.1.0]hex-3-yl]-1-(2,4-difluorophenyl)-6-fluoro-1,4-dihydro-4-oxo-1,8-naphthyridine-3-carboxylic acid mesylate

**Description:**

Fluoroquinolone antibiotic. Inhibits bacterial DNA topoisomerase IV and DNA gyrase and forms a stable quinolone-DNA complex with these enzymes which reversibly inhibits DNA synthesis. Displays potent activity against gram-positive and gram-negative bacteria. Increases the production of mitochondrial NO in immortalized hepatocytes; also increases mitochondrial Ca<sup>2+</sup>. Inhibits Panx-1 (IC<sub>50</sub> ~ 4 $\mu$ M).

**Physical and Chemical Properties:**

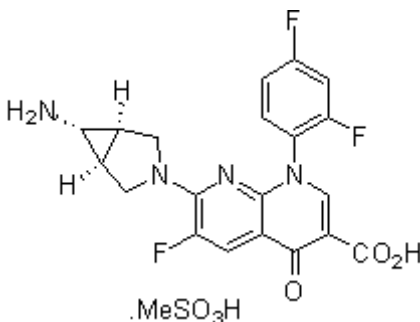
Batch Molecular Formula: C<sub>20</sub>H<sub>15</sub>F<sub>3</sub>N<sub>4</sub>O<sub>3</sub>·CH<sub>3</sub>SO<sub>3</sub>H

Batch Molecular Weight: 512.46

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Desiccate at RT

**Solubility & Usage Info:**

water to 50 mM  
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. Our standard recommendations are:

**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.

**Licensing Information:**

Sold for research purposes under agreement from Pfizer Inc.

**References:**

**Poon et al** (2014) Unexpected link between an antibiotic, pannexin channels and apoptosis. *Nature* **507** 329. PMID: 24646995.

**Gootz et al** (1996) Activity of the new fluoroquinolone trovafloxacin (CP-99,219) against DNA gyrase and topoisomerase IV mutants of *Streptococcus pneumoniae* selected in vitro. *Antimicrob.Agents Chemother.* **40** 2691. PMID: 9124824.

**Neu and Chin** (1994) In vitro activity of the new fluoroquinolone CP-99,219. *Antimicrob.Agents Chemother.* **38** 2615. PMID: 7872757.

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

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel: +1 612 379 2956