



## CERTIFICATE OF ANALYSIS

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### 1. Identification

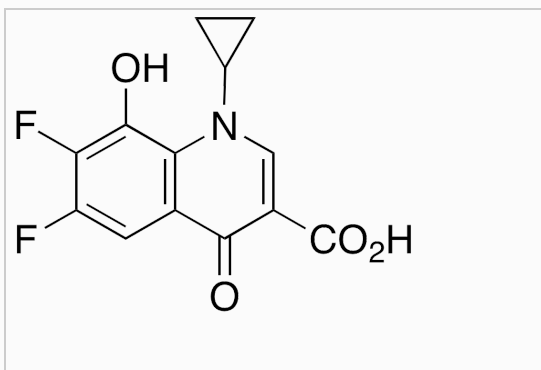
**Catalogue Number:** C988638

**CAS Number:** 154093-72-8

**Product:** 1-Cyclopropyl-6,7-difluoro-1,4-dihydro-8-hydroxy-4-oxo-3-quinolinecarboxylic Acid

**Synonym:** Moxifloxacin impurity;  
Moxifloxacin 8-Hydroxy Quinolic Acid

**Structure:**



**Molecular Formula:**

C<sub>13</sub>H<sub>9</sub>F<sub>2</sub>NO<sub>4</sub>

**Molecular weight:**

281.21

**Source of Product:**

Synthetic

**Solubility:**

DMSO (Slightly), Methanol (Slightly, Heated)

**Lot Number:** 19-MVI-71-2

**Purity:** 98%

**Shipping Condition:** This Product Is Stable To Be Shipped At Room Temperature

**Storage Condition:** 4°C

### 2. Warning

**Warning 1:** Not Determined

**Warning 2:**

**Warning 3:**

### 3. Analytical Information

Tests:	Specifications:	Results:
Appearance	White to Pale Beige Solid	White to Pale Beige Solid
MS	Conforms to Structure	Conforms
NMR	Conforms to Structure	Conforms
F NMR	Conforms to Structure	Conforms
HPLC Purity	>95%	99.79% (355 nm)

**Additional Information:** TLC Conditions: SiO<sub>2</sub>; Dichloromethane : Methanol = 9 : 1; Visualized with UV and KMnO<sub>4</sub>; Single Spot, R<sub>f</sub> = 0.35.

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of ± 2%. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

### 4. Signatures

Reviewed By	Reviewed By	C of A Approved By	Test Date	Retest Date
Neha Khanna	Toni Rantanen	My Nguyen	12/5/2019	12/3/2026