



# **Certificate of Analysis**

www.tocris.com

Product Name: ML 337 Catalog No.: 4982 Batch No.: 1

CAS Number: 1443118-44-2

IUPAC Name: [2-Fluoro-4-[2-(4-methoxyphenyl)ethynyl]phenyl][(3R)-3-hydroxy-1-piperidinyl]methanone

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{21}H_{20}FNO_3$ Batch Molecular Weight: 353.39

Physical Appearance: Off-white solid

Solubility: DMSO to 100 mM ethanol to 20 mM

Storage: Store at +4°C

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.42$  (Chloroform:Methanol [95:5])

HPLC: Shows 99.6% purity
Chiral HPLC: Shows 99.8% purity

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

**Optical Rotation:**  $[\alpha]_D = -28.8$  (Concentration = 1, Solvent = Methanol)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 71.37 5.7 3.96 Found 71.33 5.65 4.01



# **Product Information**

Print Date: Jan 29th 2019

www.tocris.com

Product Name: ML 337 Catalog No.: 4982 Batch No.: 1

CAS Number: 1443118-44-2

IUPAC Name: [2-Fluoro-4-[2-(4-methoxyphenyl)ethynyl]phenyl][(3R)-3-hydroxy-1-piperidinyl]methanone

#### **Description:**

Selective negative allosteric modulator of mGlu $_3$  (IC $_{50}$  = 593 nM). Displays no activity at mGlu $_1$ , mGlu $_2$  or mGlu $_{4-8}$  at concentrations up to 30  $\mu$ M. Brain penetrant.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>21</sub>H<sub>20</sub>FNO<sub>3</sub> Batch Molecular Weight: 353.39 Physical Appearance: Off-white solid

Minimum Purity: >98%

#### **Batch Molecular Structure:**

Storage: Store at +4°C

# Solubility & Usage Info:

DMSO to 100 mM ethanol to 20 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.

## References:

**Wenthur** *et al* (2013) Discovery of (R)-(2-fluoro-4-((-4-methoxyphenyl)ethynyl)phenyl) (3-hydroxypiperidin-1-yl)methanone (ML337), an mGlu<sub>3</sub> selective and CNS penetrant negative allosteric modulator (NAM). J.Med.Chem. **56** 5208. PMID: 23718281.

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