

# **Certificate of Analysis**

Print Date: Dec 1st 2017

www.tocris.com

Product Name: PF 05190457 Catalog No.: 6350 Batch No.: 1

CAS Number: 1334782-79-4

IUPAC Name: 1-[2-[(1R)-2,3-Dihydro-5-(6-methyl-4-pyrimidinyl)-1H-inden-1-yl]-2,7-diazaspiro[3,5]non-7-yl]-2-(2-methylimidazo

[2,1-b]thiazol-6-yl)ethanone

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{29}H_{32}N_6OS$ **Batch Molecular Weight:** 512.67

Physical Appearance: Pale yellow solid

**Solubility:** DMSO to 5 mM with gentle warming

ethanol to 10 mM with gentle warming

Storage: Store at -20°C

**Batch Molecular Structure:** 

### 2. ANALYTICAL DATA

**HPLC:** Shows 98.6% purity

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

**Optical Rotation:**  $[\alpha]_D = +53.7$  (Concentration = 0.25, Solvent = Methanol)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 67.94 6.29 16.38 Found 67.69 6.27 16.39

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



# **Product Information**

Print Date: Dec 1st 2017

www.tocris.com

PF 05190457 Catalog No.: 6350 **Product Name:** Batch No.: 1

CAS Number: 1334782-79-4

**IUPAC Name:** 1-[2-[(1R)-2,3-Dihydro-5-(6-methyl-4-pyrimidinyl)-1H-inden-1-yl]-2,7-diazaspiro[3,5]non-7-yl]-2-(2-methylimidazo

[2,1-b]thiazol-6-yl)ethanone

#### **Description:**

High affinity and selective ghrelin receptor inverse agonist (K<sub>d</sub> = 3 nM). Exhibits selectivity for ghrelin receptors over a panel of other targets. Increases intracellular Ca2+ concentration in and insulin secretion from human islets in vitro. Increases gastric afferent nerve activity in a rat ex vivo stomach preparation.

# **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>29</sub>H<sub>32</sub>N<sub>6</sub>OS Batch Molecular Weight: 512.67 Physical Appearance: Pale yellow solid

Minimum Purity: >98%

# **Batch Molecular Structure:**

Storage: Store at -20°C

## Solubility & Usage Info:

DMSO to 5 mM with gentle warming ethanol to 10 mM with gentle warming

### 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:

Kong et al (2016) Pharmacological characterization of the first in class clinical candidate PF-05190457; a selective ghrelin receptor competitive antagonist with inverse agonism that increases vagal afferent firing and glucose-dependent insulin secretion ex vivo. Br.J.Pharmacol. 173 1452. PMID: 26784385.

Bhattacharya et al (2014) Discovery of PF-5190457, a potent, selective, and orally bioavailable ghrelin receptor inverse agonist clinical candidate. ACS Med.Chem.Lett. 5 474. PMID: 24900864.

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