# Inhibitors

### BMS-986121

Cat. No.: HY-141515 CAS No.: 313671-26-0 Molecular Formula:  $C_{15}H_{\alpha}Cl_{\gamma}N_{\gamma}O_{\gamma}S$ 

Molecular Weight: 366.22

Target: **Opioid Receptor** 

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Powder

> 4°C 2 years

3 years

-80°C In solvent 6 months

-20°C

-20°C 1 month

**Product** Data Sheet

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (273.06 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.7306 mL	13.6530 mL	27.3060 mL
	5 mM	0.5461 mL	2.7306 mL	5.4612 mL
	10 mM	0.2731 mL	1.3653 mL	2.7306 mL

Please refer to the solubility information to select the appropriate solvent.

## **BIOLOGICAL ACTIVITY**

Description BMS-986121 is a positive allosteric modulator (PAM) of the μ opioid receptor extracted from patent WO2014107344. BMS-

986121 is built on a chemical scaffold representing a new chemotype for  $\mu$  receptor PAMs<sup>[1][2][3]</sup>.

IC<sub>50</sub> & Target μ Opioid Receptor/MOR

In Vitro BMS-986121 (1  $\mu$ M $\sim$ 1 mM) significantly augments the  $\beta$ -arrestin–recruitment response produced by a low concentration of  $endomorphin-I \ (PAM-detection\ mode).\ BMS-986121\ significantly\ increases\ the\ inhibition\ of\ forskolin-stimulated\ adenylyl$ cyclase activity produced by a -EC $_{10}$  (30 pM) concentration of endomorphin-I in CHO $\mu$  cells. BMS-986121 (100  $\mu$ M) produces

leftward shifts in the potency of endomorphin-I (fourfold) and leu-enkephalin (sixfold), in inhibition of forskolin-stimulated cAMP-accumulation assays in CHO- $\mu$  cells<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### **REFERENCES**

[1]. Burford NT, et al. Discover 10835.	y of positive allosteric modu	lators and silent allosteric modul	lators of the μ-opioid receptor. Prod	c Natl Acad Sci U S A. 2013;110(26):10830-
[2]. WO2014107344				
[3]. Bisignano P, et al. Ligand-	Based Discovery of a New Sc	affold for Allosteric Modulation c	of the μ-Opioid Receptor. J Chem In	f Model. 2015;55(9):1836-1843.
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