

# **Certificate of Analysis**

Print Date: Aug 12th 2020

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Product Name: GX 201 Catalog No.: 7029 Batch No.: 1

CAS Number: 1788071-27-1

IUPAC Name: 4-[[1-[[2-Chloro-5-(trifluoromethyl)phenyl]methyl]-4-piperidinyl]methoxy]-5-cyclopropyl-2-fluoro-*N*-(methylsulfonyl)

benzamide

# 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>25</sub>H<sub>27</sub>ClF<sub>4</sub>N<sub>2</sub>O<sub>4</sub>S.<sup>3</sup>/<sub>4</sub>H<sub>2</sub>O

**Batch Molecular Weight:** 576.51 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM Storage: Store at -20°C

**Batch Molecular Structure:** 

# 2. ANALYTICAL DATA

**HPLC:** Shows 99.2% purity

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 52.08 4.98 4.86 Found 51.9 4.83 4.76

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



# **Product Information**

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#### **Description:**

Potent and selective  $Na_v1.7$  blocker ( $IC_{50} = 3.2$  nM). Exhibits 10x selectivity for  $Na_v1.7$  over  $Na_v1.1$ ,  $Na_v1.2$ , and  $Na_v1.6$  channels. Displays prolonged residency time on the  $Na_v1.7$  channel. Chronic dosing increases compound potency ~10-fold and provides efficacy that persists after the compound has cleared from plasma. Suppresses neuropathic pain in a mouse diabetic neuropathy model. Analgesic.

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

Batch Molecular Formula: C<sub>25</sub>H<sub>27</sub>ClF<sub>4</sub>N<sub>2</sub>O<sub>4</sub>S.<sup>3</sup>/<sub>4</sub>H<sub>2</sub>O

Batch Molecular Weight: 576.51 Physical Appearance: White solid

Minimum Purity: ≥98%

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

Storage: Store at -20°C

# Solubility & Usage Info:

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.

### References:

**Banker** *et al* (2018) Selective Na<sub>V</sub>1.7 antagonists with long residence time show improved efficacy against inflammatory and neuropathic pain. Cell Rep. **24** 3133. PMID: 30231997.

Shields et al (2018) Insensitivity to pain upon adult-onset deletion of Na<sub>V</sub>1.7 or its blockade with selective inhibitors J.Neurosci. 38 10180, PMID: 30301756.

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