

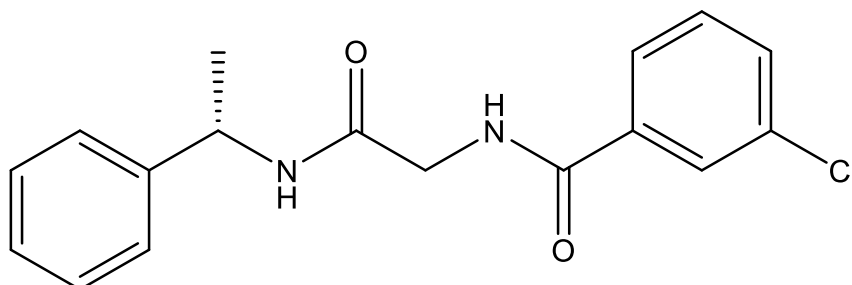
**Catalog # 10-3880**

**JNJ-63533054**

CAS# 1802326-66-4

(S)-3-Chloro-N-(2-oxo-2-((1-phenylethyl)amino)ethyl) benzamide

Lot # X109531



Potent and selective brain-penetrant GPR139 agonist ( $EC_{50}=16$  nM) an orphan G-protein-coupled receptor expressed in the CNS.<sup>1</sup> Tritium-labeled JNJ-63533054 binds to cell membranes expressing GPR139 and can be displaced by putative endogenous ligands.<sup>2</sup> Decreases compulsive-like alcohol drinking and hyperalgesia in alcohol-dependent rodents.<sup>3</sup> Suppresses morphine intake in a mouse self-administration model.<sup>4</sup>

- 1) Dvorak *et al.* (2015), *Identification and SAR of Glycine Benzamides as Potent Agonists for the GPR139 Receptor*; ACS Med. Chem. Lett., **6** 1015
- 2) Liu *et al.* (2015), *GPR139, an Orphan Receptor Highly Enriched in the Habenula and Septum, Is Activated by the Essential Amino Acids L-Tryptophan and L-Phenylalanine*; Mol. Pharmacol., **88** 911
- 3) Kononoff *et al.* (2018), *Systemic and Intra-Habenular Activation of the Orphan G Protein-Coupled Receptor GPR139 Decreases Compulsive-Like Alcohol Drinking and Hyperalgesia in Alcohol-Dependent Rats*; eNeuro, **5** ENEURO 0153-18 2018
- 4) Wang *et al.* (2019), *Genetic behavioral screen identifies an orphan anti-opioid system*; Science, **365** 1267

#### PHYSICAL DATA

Molecular Weight:	316.78
Molecular Formula:	C <sub>17</sub> H <sub>17</sub> ClN <sub>2</sub> O <sub>2</sub>
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 35 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 2 months.

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