

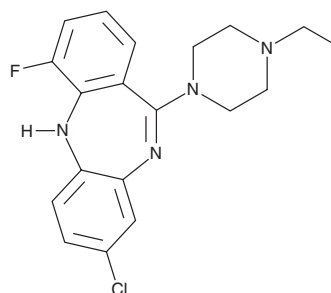
# PRODUCT INFORMATION



**JHU37160**

Item No. 39531

**CAS Registry No.:** 2369979-68-8  
**Formal Name:** 8-chloro-11-(4-ethyl-1-piperazinyl)-4-fluoro-5H-dibenzo[b,e][1,4]diazepine  
**MF:** C<sub>19</sub>H<sub>20</sub>ClFN<sub>4</sub>  
**FW:** 358.8  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

JHU37160 is supplied as a solid. A stock solution may be made by dissolving the JHU37160 in the solvent of choice, which should be purged with an inert gas. JHU37160 is slightly soluble in methanol.

JHU37160 is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

## Description

JHU37160 is an activator of designer receptors exclusively activated by designer drugs (DREADDs) derived from human muscarinic acetylcholine receptors (mAChRs).<sup>1</sup> It binds to hM3Dq and hM4Di receptors (K<sub>S</sub> = 1.9 and 3.6 nM, respectively) and induces G<sub>α<sub>o1</sub></sub> activation in HEK293 cells expressing hM3Dq or hM4Di (EC<sub>50</sub>s = 18.5 and 0.2 nM, respectively). *In vivo*, JHU37160 (0.01-1 mg/kg) inhibits locomotor activity in D1-hM3Dq and D1-hM4Di transgenic mice.

## Reference

1. Bonaventura, J., Eldridge, M.A.G., Hu, F., *et al.* High-potency ligands for DREADD imaging and activation in rodents and monkeys. *Nat. Commun.* **10**(1), 4627 (2019).

### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

### WARRANTY AND LIMITATION OF REMEDY

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