

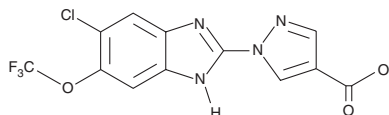
# PRODUCT INFORMATION



**JNJ-42041935**

Item No. 14316

**CAS Registry No.:** 1193383-09-3  
**Formal Name:** 1-[6-chloro-5-(trifluoromethoxy)-1H-benzimidazol-2-yl]-1H-pyrazole-4-carboxylic acid  
**Synonym:** HIF-PHD Inhibitor II  
**MF:** C<sub>12</sub>H<sub>6</sub>ClF<sub>3</sub>N<sub>4</sub>O<sub>3</sub>  
**FW:** 346.7  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 252, 302 nm  
**Supplied as:** A crystalline 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

JNJ-42041935 is supplied as a crystalline solid. A stock solution may be made by dissolving the JNJ-42041935 in the solvent of choice, which should be purged with an inert gas. JNJ-42041935 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of JNJ-42041935 in these solvents is approximately 10, 30, and 25 mg/ml, respectively.

JNJ-42041935 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, JNJ-42041935 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. JNJ-42041935 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

JNJ-42041935 is a selective, 2-OG competitive, and reversible inhibitor of HIF-PH enzymes (K<sub>s</sub> = 12.3, 51.3, and 22.4 nM for HIF-PH1, HIF-PH2, and HIF-PH3, respectively).<sup>1</sup> It is >100-fold selective for HIF-PH compared to the related FIH (factor-inhibiting HIF) and a panel of various other enzymes.<sup>1</sup> In an inflammation-induced anemia model in rats, 100 μM/kg/day JNJ-42041935 significantly increased the number of circulating reticulocytes and red blood cells, increased blood hemoglobin and hematocrit, and restored mean corpuscular volume and mean cell hemoglobin of red blood cells.<sup>1</sup>

## Reference

1. Barrett, T.D., Palomino, H.L., Brondstetter, T.I., *et al.* Pharmacological characterization of 1-(5-chloro-6-(trifluoromethoxy)-1H-benzimidazol-2-yl)-1H-pyrazole-4-carboxylic acid (JNJ-42041935), a potent and selective hypoxia-inducible factor prolyl hydroxylase inhibitor. *Mol. Pharmacol.* **79**(6), 910-920 (2011).

### 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/10/2022

## CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
[WWW.CAYMANCHEM.COM](http://WWW.CAYMANCHEM.COM)