

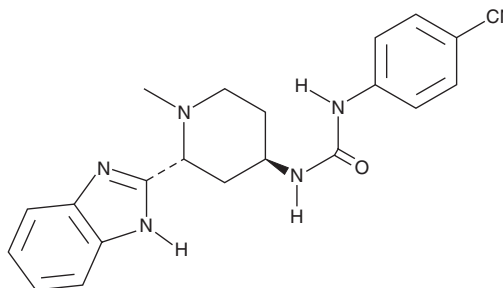
# PRODUCT INFORMATION



**PF-04449913**

Item No. 9002936

**CAS Registry No.:** 1095173-27-5  
**Formal Name:** N-[(2R,4R)-2-(1H-benzimidazol-2-yl)-1-methyl-4-piperidiny]-N'-(4-cyanophenyl)-urea  
**Synonym:** Glasdegib  
**MF:** C<sub>21</sub>H<sub>22</sub>N<sub>6</sub>O  
**FW:** 374.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 275, 281 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

PF-04449913 is supplied as a crystalline solid. A stock solution may be made by dissolving the PF-04449913 in the solvent of choice, which should be purged with an inert gas. PF-04449913 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of PF-04449913 in ethanol is approximately 1 mg/ml and approximately 20 mg/ml in DMSO and DMF.

PF-04449913 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PF-04449913 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. PF-04449913 has a solubility of approximately 0.125 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

PF-04449913 is an orally available Hedgehog pathway inhibitor that acts by binding Smoothed (Smo) and blocking signal transduction (IC<sub>50</sub> = 5 nM).<sup>1</sup> It has been shown to attenuate leukemia stem cell self-renewal and cell cycle progression in primary acute myeloid leukemia cells and in an *in vivo Drosophila* model.<sup>2,3</sup>

## References

1. Munchhof, M.J., Li, Q., Shavnya, A., *et al.* Discovery of PF-04449913, a potent and orally bioavailable inhibitor of smoothed. *ACS Med. Chem. Lett.* **3**(2), 106-111 (2011).
2. Fukushima, N., Minami, Y., Kakiuchi, S. *et al.*, Small-molecule Hedgehog inhibitor attenuates the leukemia-initiation potential of acute myeloid leukemia cells. *Cancer Sci* **107**, 1422-1420 (2016).
3. Giordani, G., Barraco, M., Giangrande, A., *et al.* The human smoothed inhibitor PF-04449913 induces exit from quiescence and loss of multipotent *Drosophila* hematopoietic progenitor cells. *Oncotarget* **7**(34), 55313-55327 (2016).

### 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.

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