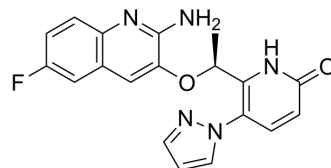


## PF-07059013

Cat. No.:	HY-139293
CAS No.:	2435610-93-6
Molecular Formula:	C <sub>19</sub> H <sub>16</sub> FN <sub>5</sub> O <sub>2</sub>
Molecular Weight:	365.36
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	PF-07059013 is an orally active and potent noncovalent modulator of sickled hemoglobin (HbS). PF-07059013 specifically binds to Hb with nanomolar affinity and displays strong partitioning into red blood cells (RBCs). PF-07059013 can be used for sickle cell disease (SCD) research <sup>[1][2]</sup> .								
<b>In Vivo</b>	<p>PF-07059013 (10-490 mg/kg, Oral gavage, twice daily, for 2 weeks) shows reduction in sickling in Townes SCD mice<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Townes SCD mice (8-10 weeks old, male)<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>10, 40, 200, and 490 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Oral gavage, twice daily, for 2 weeks</td> </tr> <tr> <td>Result:</td> <td>Showed a 37.8% (±9.0%) reduction in sickling at 200 mg/kg compared to vehicle treated mice.</td> </tr> </table>	Animal Model:	Townes SCD mice (8-10 weeks old, male) <sup>[1]</sup>	Dosage:	10, 40, 200, and 490 mg/kg	Administration:	Oral gavage, twice daily, for 2 weeks	Result:	Showed a 37.8% (±9.0%) reduction in sickling at 200 mg/kg compared to vehicle treated mice.
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### REFERENCES

- [1]. Gopalsamy A, et al. PF-07059013: A Noncovalent Modulator of Hemoglobin for Treatment of Sickle Cell Disease. *J Med Chem.* 2021 Jan 14;64(1):326-342.
- [2]. Aaron Baldwin, et al. Route Optimization of the Non-covalent Modulator of Hemoglobin PF-07059013 for the Treatment of Sickle Cell Disease, Part I: From Discovery Synthesis to First Kilogram-Scale Manufacture. *Org. Process Res. Dev.* 2023.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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