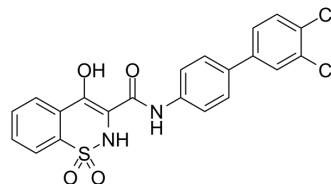


## PF-9184

<b>Cat. No.:</b>	HY-19622
<b>CAS No.:</b>	1221971-47-6
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>14</sub> Cl <sub>2</sub> N <sub>2</sub> O <sub>4</sub> S
<b>Molecular Weight:</b>	461.32
<b>Target:</b>	PGE synthase
<b>Pathway:</b>	Immunology/Inflammation
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	PF-9184 is a potent and highly selective inhibitor of human microsomal prostaglandin E synthase-1 (mPGES-1), with an IC <sub>50</sub> of 16.5 nM. PF-9184 inhibits IL-1β-induced PGE <sub>2</sub> synthesis in vitro <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 16.5 nM (mPGES-1) <sup>[1]</sup>
<b>In Vitro</b>	<p>PF-9184 (0.015-100 μM; 24 hours) inhibits IL-1β-stimulated prostaglandin E<sub>2</sub> (PGE<sub>2</sub>) synthesis in rheumatoid arthritis (RASf) in synovial fibroblasts derived from patients and has no apparent cytotoxic effects up to 100 μM<sup>[1]</sup>.</p> <p>PF-9184 (0.015-100 μM) potentially blocks mPGES-1 ability to synthesize PGE<sub>2</sub> from PGH<sub>2</sub>, and with no apparent inhibitory effects on COX-2 and prostacyclin synthase in cells<sup>[1]</sup>.</p> <p>PF-9184 (0.015-100 μM) inhibits PGE<sub>2</sub> weakly but has no effect on TXB<sub>2</sub> synthesis except at 100 μM in human whole blood and modified blood assays<sup>[1]</sup>.</p> <p>PF-9184 is a poor inhibitor of recombinant rat mPGES-1 (IC<sub>50</sub>=1080±398 nM)<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>
<b>In Vivo</b>	<p>PF-9184 (oral administration or even local delivery) has no effect on PGE<sub>2</sub> synthesis in recombinant rats<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### REFERENCES

[1]. Gabriel M, et, al. Distinction of microsomal prostaglandin E synthase-1 (mPGES-1) inhibition from cyclooxygenase-2 inhibition in cells using a novel, selective mPGES-1 inhibitor. *Biochem Pharmacol.* 2010 May 15; 79(10): 1445-54.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA