

PF-4191834

## Chemical Properties

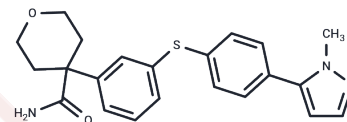
CAS No. : 1029317-21-2

Formula: C<sub>22</sub>H<sub>23</sub>N<sub>3</sub>O<sub>2</sub>S

Molecular Weight: 393.5

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	PF-4191834 is a noniron chelating and non-redox inhibitor of the 5-Lipoxygenase (5-LOX) with an IC <sub>50</sub> of 229 nM. PF-4191834 shows ~300-fold selectivity for 5-LOX over 12-LOX and 15-LOX and displays no activity toward the cyclooxygenase enzymes. PF-4191834
Targets(IC <sub>50</sub> )	Lipoxygenase
In vitro	PF-4191834 exerts a concentration-dependent inhibition of human 5-LOX (IC <sub>50</sub> : 130 nM and an IC <sub>80</sub> : 370 nM). PF-4191834 inhibits the synthesis of the 5-LOX products 5-HETE, 5-oxo-EETE, LTB <sub>4</sub> , and LTE <sub>4</sub> with estimated IC <sub>50</sub> values between 100 and 190 nM. However, it does not inhibit significantly the COX-1/2 enzymes or the 12- or 15-LOX enzymes at concentrations up to 30 μM[1].

## Solubility Information

Solubility	DMSO: 50 mg/mL (127.06 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2.5 mg/mL (6.35 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.5413 mL	12.7065 mL	25.413 mL
5 mM	0.5083 mL	2.5413 mL	5.0826 mL
10 mM	0.2541 mL	1.2706 mL	2.5413 mL
50 mM	0.0508 mL	0.2541 mL	0.5083 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Masferrer JL, et al. Pharmacology of PF-4191834, a novel, selective non-redox 5-lipoxygenase inhibitor effective in inflammation and pain. *J Pharmacol Exp Ther.* 2010 Jul;334(1):294-301.

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