

KF 13218

## Chemical Properties

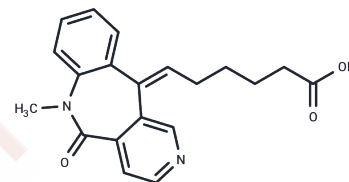
CAS No. : 127654-03-9

Formula: C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub>

Molecular Weight: 336.38

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	KF 13218 is a selective, potent and long lasting thromboxane B2 (TXB <sub>2</sub> ) synthase inhibitor with an IC <sub>50</sub> value of 5.3±1.3 nM.
Targets(IC <sub>50</sub> )	Histone Demethylase, Prostaglandin Receptor
In vitro	KF 13218 effectively suppresses arachidonic acid-triggered thromboxane B <sub>2</sub> synthesis in human intact platelets, showing a notable inhibitory concentration (IC <sub>50</sub> ) of 5.3±1.3 nM. This potency is approximately fivefold greater against intact platelets than against the microsomal enzyme, indicating a significant specificity. Remarkably, the compound's ability to inhibit thromboxane synthase within platelets remains even after the extracellular substance is eliminated. Furthermore, KF 13218 demonstrates inhibition of both human and bovine platelet thromboxane synthase with IC <sub>50</sub> values of 27±5.8 nM and 36±6.9 nM, respectively, without affecting cyclooxygenase or 5-lipoxygenase at doses up to 100 μM nor antagonizing thromboxane A <sub>2</sub> /prostaglandin H <sub>2</sub> receptors.
In vivo	KF 13218, when administered orally at a dosage of 0.1 mg/kg, effectively prevents mortality caused by sodium arachidonate in rabbits. Additionally, dosages ranging from 0.03 mg/kg to 3 mg/kg in rats lead to a dose-dependent inhibition of thromboxane B <sub>2</sub> production in serum, with the effect maintained for up to 72 hours.

### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.9728 mL	14.8641 mL	29.7283 mL
5 mM	0.5946 mL	2.9728 mL	5.9457 mL
10 mM	0.2973 mL	1.4864 mL	2.9728 mL
50 mM	0.0595 mL	0.2973 mL	0.5946 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.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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