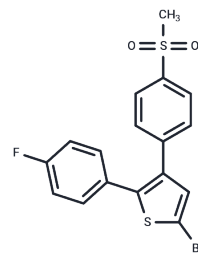


DuP-697

## Chemical Properties

CAS No. : 88149-94-4  
 Formula: C<sub>17</sub>H<sub>12</sub>BrFO<sub>2</sub>S<sub>2</sub>  
 Molecular Weight: 411.31  
 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	DuP-697 is an irreversible, specific COX-2 inhibitor with IC <sub>50</sub> values of 10 nM and 800 nM for human COX-2 and COX-1. DuP-697 also exhibits anti-angiogenic, anti-inflammatory, antipyretic and apoptotic effects.
Targets(IC <sub>50</sub> )	Apoptosis, COX
In vitro	<b>METHODS:</b> DuP-697 (0, 12.5, 25, 50, 100, 200 μM, 36 hours) was used to treat K562 or CML cell lines. The effects on cell growth were evaluated by MTT assay, and the effects on cell apoptosis were detected by flow cytometry. <b>RESULTS</b> DuP-697 significantly inhibited the growth of K562 cells and primary CML cells with an IC <sub>50</sub> value of 31.7 μM, and induced cell apoptosis in a concentration-dependent manner. [2]
In vivo	<b>METHODS:</b> DuP 697 (5 mg/kg, intraperitoneal injection) was used to treat rats 1 hour before thrombin injection to investigate its neurotoxic effects on dopaminergic neuronal degeneration in the substantia nigra (SN) of rats. <b>RESULTS</b> The loss of TH-ip neurons was partially attenuated in the SN of rats treated with DuP-697. [2]

## Solubility Information

Solubility	DMSO: 45 mg/mL (109.41 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4313 mL	12.1563 mL	24.3126 mL
5 mM	0.4863 mL	2.4313 mL	4.8625 mL
10 mM	0.2431 mL	1.2156 mL	2.4313 mL
50 mM	0.0486 mL	0.2431 mL	0.4863 mL

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

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- Altun A, et al. Anticancer effect of COX-2 inhibitor DuP-697 alone and in combination with tyrosine kinase inhibitor (E7080) on colon cancer cell lines. *Asian Pac J Cancer Prev.* 2014;15(7):3113-21.
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- Choi SH, et al. Thrombin-induced microglial activation produces degeneration of nigral dopaminergic neurons in vivo. *J Neurosci.* 2003 Jul 2;23(13):5877-86.

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