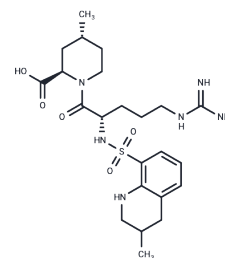


## Argatroban

## Chemical Properties

CAS No. :	74863-84-6
Formula:	C <sub>23</sub> H <sub>36</sub> N <sub>6</sub> O <sub>5</sub> S
Molecular Weight:	508.63
Appearance:	no data available
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year



## Biological Description

Description	Argatroban (MCI-9038), a specific thrombin inhibitor, which is a non-heparin anticoagulant, prevents the formation of thrombi.
Targets(IC <sub>50</sub> )	Thrombin
In vitro	In a rat distal cerebral artery occlusion model, administration of Argatroban at a dose of 0.3 mg/hour significantly reduced the number of microthrombi following artery occlusion. Argatroban treatment (at 0.1 and 0.3 mg/hour) notably reversed the decline in local cerebral blood flow in rats with distal cerebral artery occlusion.
In vivo	Argatroban directly induces phenotypic transformation in vascular smooth muscle cells, upregulating the expression of myofilament-related proteins, PAI-1, and $\beta$ -actin mRNA. In animal models with thrombosis rich in platelets and erythrocytes, Argatroban (ED <sub>50</sub> =125 $\mu$ g/kg) demonstrates antithrombotic effects. It exhibits antithrombin activity across a range (K <sub>i</sub> =5 nM-39 nM).

## Solubility Information

Solubility	Ethanol: 6 mg/mL (11.8 mM), Sonication is recommended. DMSO: 45 mg/mL (88.47 mM), Sonication is recommended. H <sub>2</sub> O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9661 mL	9.8303 mL	19.6607 mL
5 mM	0.3932 mL	1.9661 mL	3.9321 mL
10 mM	0.1966 mL	0.983 mL	1.9661 mL
50 mM	0.0393 mL	0.1966 mL	0.3932 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.

### Reference

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