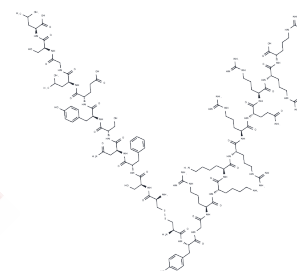


## Delcasertib

## Chemical Properties

CAS No. :	949100-39-4
Formula:	C <sub>120</sub> H <sub>199</sub> N <sub>45</sub> O <sub>34</sub> S <sub>2</sub>
Molecular Weight:	2880.28
Storage:	Keep away from moisture Powder: -20°C for 3 years   In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



## Biological Description

Description	Delcasertib (KAI-9803) is a potent and selective inhibitor of $\delta$ -protein kinase C ( $\delta$ PKC).
Targets(IC50)	PKC
In vitro	Delcasertib is composed of a selective $\delta$ -protein kinase C ( $\delta$ PKC) inhibitor peptide derived from the $\delta$ V1-1 portion of $\delta$ PKC (termed 'cargo peptide' ), conjugated reversibly to the cell-penetrating peptide 11-amino acid, arginine-rich sequence of the HIV type 1 transactivator protein (TAT47-57; termed 'carrier peptide' ) via a disulfide bond.
In vivo	KAI-9803 ameliorates pathological conditions in acute myocardial infarction and reduce pain via specific modulation of membrane-translocation of PKC delta or epsilon. Delcasertib has an acceptable safety and tolerability profile when delivered via intracoronary injection during primary percutaneous coronary intervention for ST-segment elevation myocardial infarction. Delcasertib administration at the end of ischemia has been found to reduce cardiac damage caused by ischemia-reperfusion in a rat model of acute myocardial infarction. 14C-KAI-9803 is rapidly delivered to many tissues, including the heart (1.21 $\mu$ g eq/g tissue), while being quickly cleared from the systemic circulation. The distribution of Delcasertib to tissues such as the liver, kidney, and heart is facilitated by the reversible conjugation to TAT47-57.

## Solubility Information

Solubility	DMSO: 99 mg/mL (34.37 mM), Sonication is recommended. ( $< 1$ mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (1.74 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	0.3472 mL	1.7359 mL	3.4719 mL
5 mM	0.0694 mL	0.3472 mL	0.6944 mL
10 mM	0.0347 mL	0.1736 mL	0.3472 mL
50 mM	0.0069 mL	0.0347 mL	0.0694 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

Miyaji Y, et al. Distribution of KAI-9803, a novel  $\delta$ -protein kinase C inhibitor, after intravenous administration to rats. *Drug Metab Dispos.* 2011 Oct;39(10):1946-53.

Srisomboon Y, Tojima I, Iijima K, et al. Allergen-induced activation of epithelial P2Y2 receptors promotes ATP exocytosis and type 2 immunity in airways. *Journal of Allergy and Clinical Immunology.* 2025

Bates E, et al. Intracoronary KAI-9803 as an adjunct to primary percutaneous coronary intervention for acute ST-segment elevation myocardial infarction. *Circulation.* 2008 Feb 19;117(7):886-96.

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