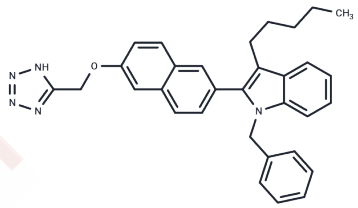
Data Sheet (Cat.No.T25915)

TargetMol

Diaplasinin

Chemical Properties



CAS No. :	481631-45-2
Formula:	C32H31N5O
Molecular Weight:	501.62
Storage:	Keep away from direct sunlight,Keep away from moisture 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	Diaplasinin (PAI-749) is a highly efficient inhibitor of plasminogen activator inhibitor-1 (PAI-1) with antithrombotic activity. It can be used in cardiovascular disease research.
Targets(IC50)	PAI-1
In vitro	Diaplasinin is an inhibitor targeting plasminogen activator inhibitor 1 (PAI-1) with an IC50 of 295 nM.[1] Diaplasinin inhibits PAI-1 synthesis with high potency and selectivity, and maintains tissue-type plasminogen activator (tPA) and urokinase-type plasminogen activator (uPA) activity in the presence of PAI-1, with IC50s of 157 nM and 87 nM, respectively. In addition, Diaplasinin exhibits an apparent Kd value of 254 nM and an IC50 value of 140 nM by quenching the fluorescence of fluorescently labeled PAI-1. [2]

Solubility Information

Solubility	DMSO: 100 mg/mL (199.35 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9935 mL	9.9677 mL	19.9354 mL
5 mM	0.3987 mL	1.9935 mL	3.9871 mL
10 mM	0.1994 mL	0.9968 mL	1.9935 mL
50 mM	0.0399 mL	0.1994 mL	0.3987 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

Lucking AJ, et al. Effect of the small molecule plasminogen activator inhibitor-1 (PAI-1) inhibitor, PAI-749, in clinical models of fibrinolysis. J Thromb Haemost. 2010 Jun;8(6):1333-9.
Gardell SJ, et al. Neutralization of plasminogen activator inhibitor I (PAI-1) by the synthetic antagonist PAI-749 via a dual mechanism of action. Mol Pharmacol. 2007 Oct;72(4):897-906.