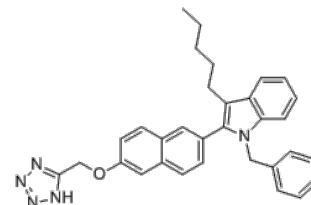


Product Name : Diaplasinin
Cat. No. : PC-49769
CAS No. : 481631-45-2
Molecular Formula : C₃₂H₃₁N₅O
Molecular Weight : 501.63
Target : Plasminogen Activator Inhibitor-1 (PAI-1)
Solubility : 10 mM in DMSO



Biological Activity

Diaplasinin (PAI-749) is a potent, selective antagonist of plasminogen activator inhibitor 1 (**PAI-1**) with IC₅₀ of 154 nM (preservation of tPA activity) and K_i of 253 nM, blocks PAI-1 mediated inhibition of uPA with IC₅₀ of 87 nM.

Diaplasinin (PAI-749) dose-dependently blocked PAI-1-mediated inactivation of tPA activity toward its low-molecular-weight amidolytic substrate, Spectrozyme tPA.

Diaplasinin (PAI-749) displayed marked selectivity for PAI-1 relative to other serpins.

Diaplasinin (PAI-749) binds directly to PAI-1, blocks PAI-1 from accessing the active site of tPA, and abrogates formation of the SDS-stable tPA/PAI-1 complex.

PAI-749 does not affect thrombus formation or fibrinolysis in a range of established human plasma and whole blood-based systems.

References

Gardell SJ, et al. *Mol Pharmacol*. 2007 Oct;72(4):897-906.

Lucking AJ, et al. *J Thromb Haemost*. 2010 Jun;8(6):1333-9.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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