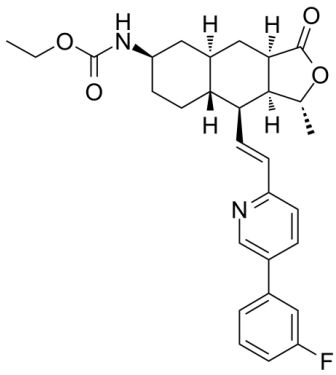
Data Sheet

Product Name:	Vorapaxar
Cat. No.:	CS-5527
CAS No.:	618385-01-6
Molecular Formula:	C29H33FN2O4
Molecular Weight:	492.58
Target:	Protease-Activated Receptor (PAR)
Pathway:	GPCR/G Protein
Solubility:	DMSO : ≥ 150 mg/mL (304.52 mM)



BIOLOGICAL ACTIVITY:

Vorapaxar (SCH 530348), an antiplatelet agent, is a selective, orally active, and competitive thrombin receptor **protease-activated receptor (PAR-1)** antagonist (K_i=8.1 nM). Vorapaxar (SCH 530348) inhibits thrombin receptor-activating peptide (TRAP)-induced platelet aggregation in a dose-dependent manner[1]. IC50 & Target: Ki: 8.1 nM (PAR-1)[1] **In Vitro:** Vorapaxar (SCH 530348) shows potent inhibition of thrombin-induced platelet aggregation with an IC_{50} of 47 nM and haTRAP-induced platelet aggregation with an IC_{50} of 25 nM. Vorapaxar (SCH 530348) inhibits thrombininduced calcium transient in human coronary artery smooth muscle cells (HCASMC) with a K_i of 1.1 nM. It also inhibits thrombin-stimulated thymidine incorporation in HCASMC with a Ki of 13 nM[1].

References:

[1]. Khoufache K, et al. PAR1 contributes to influenza A virus pathogenicity in mice. J Clin Invest. 2013 Jan;123(1):206-14.

[2]. Kehinde O, et al. Vorapaxar: A novel agent to be considered in the secondary prevention of myocardial infarction. J Pharm Bioallied Sci. 2016 Apr-Jun;8(2):98-105.

CAIndexNames:

Carbamic acid, N-[(1R,3aR,4aR,6R,8aR,9S,9aS)-9-[(1E)-2-[5-(3-fluorophenyl)-2-pyridinyl]ethenyl]dodecahydro-1-methyl-3-oxonaphtho[2,3-c]furan-6-yl]-, ethyl ester

SMILES:

O=C(O[C@@H]1C)[C@@]2([H])[C@]1([H])[C@@H](/C=C/C3=NC=C(C=C3)C4=CC=CC(F)=C4)[C@]([C@](C5)([H])C2)([H])CC[C@H]5NC(OCC)=O

Caution: Product has not been fully validated for medical applications. For research use only.

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