

# PRODUCT INFORMATION

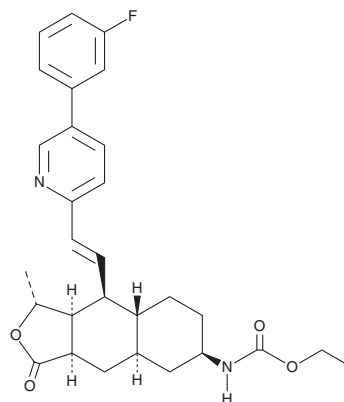


## Vorapaxar

Item No. 23119

**CAS Registry No.:** 618385-01-6  
**Formal Name:** 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]-carbamic acid, ethyl ester

**MF:** C<sub>29</sub>H<sub>33</sub>FN<sub>2</sub>O<sub>4</sub>  
**FW:** 492.6  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 272, 306 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Vorapaxar is supplied as a crystalline solid. A stock solution may be made by dissolving the vorapaxar in the solvent of choice, which should be purged with an inert gas. Vorapaxar is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of vorapaxar in these solvents is approximately 30 mg/ml.

Vorapaxar is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, vorapaxar should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Vorapaxar has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Vorapaxar is an orally bioavailable competitive antagonist of the proteinase-activated receptor (PAR1; K<sub>i</sub> = 8.1 nM), also known as the thrombin receptor.<sup>1</sup> It is selective for PAR1 over other PARs, as well as a number of GPCRs, ion channels, and receptors. It inhibits platelet aggregation induced by thrombin (Item No. 13188) and haTRAP (IC<sub>50</sub>s = 47 and 25 nM, respectively). Vorapaxar (0.1 mg/kg, i.v.) completely inhibits platelet aggregation in cynomolgus monkeys *ex vivo*. Formulations containing vorapaxar are used in the prevention of thrombotic cardiovascular events.

### Reference

1. Chackalamannil, S., Wang, Y., Greenlee, W.J., *et al.* Discovery of a novel, orally active himbacine-based thrombin receptor antagonist (SCH 530348) with potent antiplatelet activity. *J. Med. Chem.* **51**(110), 3061-3064 (2008).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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