Web: www.taiclone.com
Tel: +886-2-2735-9682
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5-R-Rivaroxaban

Catalog No: tcsc0730

Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
865479-71-6

Formula:
$C_{19}H_{18}ClN_3O_5S$

Pathway:
Metabolic Enzyme/Protease

Target:
Factor Xa

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
BAY 59-7939

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Observed Molecular Weight:
435.88

Product Description

5-R-Rivaroxaban is (R)-enantiomer of Rivaroxaban. Rivaroxaban (BAY 59-7939) is a highly potent and selective, direct **Factor Xa** (**FXa**) inhibitor, achieving a strong gain in anti-FXa potency (**IC_{50}** 0.7 nM; **K_i** 0.4 nM).

IC50 & Target: FXa[1]

In Vitro: Rivaroxaban (BAY 59-7939) is an oral, direct Factor Xa (FXa) inhibitor in development for the prevention and treatment of arterial and venous thrombosis. Rivaroxaban competitively inhibits human FXa (K_i 0.4 nM) with >10 000-fold greater selectivity than for other serine proteases; it also inhibits prothrombinase activity (IC_{50} 2.1 nM). Rivaroxaban inhibits endogenous FXa more potently in human and rabbit plasma (IC_{50} 21 nM) than rat plasma (IC_{50} 290 nM). It demonstrates anticoagulant effects in human plasma, doubling prothrombin time (PT) and activates partial thromboplastin time at 0.23 and 0.69 μM, respectively[2].

In Vivo: Rivaroxaban (BAY 59-7939) is a potent and selective, direct FXa inhibitor with excellent in vivo activity and good oral bioavailability[1]. Rivaroxaban (BAY 59-7939), administered by i.v. bolus before thrombus induction, reduces thrombus formation (ED_{50} 0.1 mg/kg), inhibits FXa, and prolongs PT dose dependently. PT and FXa are affected slightly at the ED_{50} (1.8-fold increase and 32% inhibition, respectively). At 0.3 mg/kg (dose leading to almost complete inhibition of thrombus formation), Rivaroxaban moderately prolongs PT (3.2±0.5-fold) and inhibits FXa activity (65±3%)[2].