

# 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

**Observed Molecular Weight:**

435.88

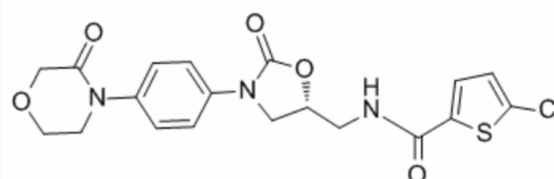
**Product Description**

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<sub>50</sub>** 0.7 nM; **K<sub>i</sub>** 0.4 nM).

IC50 & Target: FXa<sup>[1]</sup>

**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<sub>i</sub> 0.4 nM) with >10 000-fold greater selectivity than for other serine proteases; it also inhibits prothrombinase activity (IC<sub>50</sub> 2.1 nM). Rivaroxaban inhibits endogenous FXa more potently in human and rabbit plasma (IC<sub>50</sub> 21 nM) than rat plasma (IC<sub>50</sub> 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<sup>[2]</sup>.

**In Vivo:** Rivaroxaban (BAY 59-7939) is a potent and selective, direct FXa inhibitor with excellent in vivo activity and good oral bioavailability<sup>[1]</sup>. Rivaroxaban (BAY 59-7939), administered by i.v. bolus before thrombus induction, reduces thrombus formation (ED<sub>50</sub> 0.1 mg/kg), inhibits FXa, and prolongs PT dose dependently. PT and FXa are affected slightly at the ED<sub>50</sub> (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%)<sup>[2]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!