



Rivaroxaban

Catalog No: tcsc0555

Available Sizes
Size: 5mg
Size: 10mg
Size: 50mg
Specifications
CAS No: 366789-02-8
Formula: C ₁₉ H ₁₈ CIN ₃ O ₅ S
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





Rivaroxaban 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: IC50: 0.7 nM (FXa)[1]

Ki: 0.4 nM (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 μ M, 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].

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