

# VX-702

**Catalog No: tcsc0074**



## Available Sizes

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg

**Size:** 200mg



## Specifications

**CAS No:**

745833-23-2

**Formula:**

$C_{19}H_{12}F_4N_4O_2$

**Pathway:**

MAPK/ERK Pathway

**Target:**

p38 MAPK

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 42$  mg/mL (103.88 mM)

**Observed Molecular Weight:**

404.32

## Product Description

VX-702 is a highly selective inhibitor of p38 $\alpha$  MAPK(IC<sub>50</sub>=4 -20 nM), 14-fold higher potency against the p38 $\alpha$  versus p38 $\beta$ .

IC50 value: 4-20 nM [1]

Target: p38 $\alpha$  MAPK

in vitro: Pre-incubation of platelets with VX-702 (1  $\mu$ M) completely or partially inhibits p38 activation (IC50 4 to 20 nM) induced by platelet agonists including thrombin, SFLLRN, AYPGKF, U46619 and collagen. VX-702 shows no effect on platelet aggregation induced by any of the p38 MAPK agonists in the presence or absence of anti-platelet therapies [1]. VX-702 inhibits the production of IL-6, IL-1 $\beta$  and TNF $\alpha$  (IC50 = 59, 122 and 99 ng/mL, respectively) in a dose-dependent manner [2].

in vivo: The half-life of VX-702 is 16 to 20 hours, with a median clearance of 3.75 L/h and a volume of distribution of 73 L/kg. Both AUC and Cmax values are dose proportional for VX-702, which is predominantly cleared renally [2]. VX-702 (at a dose of 0.1 mg/kg twice daily) has an equivalent effect as that of methotrexate (0.1 mg/kg). In addition, VX-702 (5 mg/kg twice daily) also has an equivalent effect as prednisolone (10 mg/kg once daily), as measured by percentage inhibition of wrist joint erosion and inflammation score [3].



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