



## **Avatrombopag**

**Catalog No: tcsc3397** 



## **Available Sizes**

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



## **Specifications**

CAS No:

570406-98-3

Formula:

 $\mathsf{C_{29}H_{34}Cl_{2}N_{6}O_{3}S_{2}}$ 

**Pathway:** 

Immunology/Inflammation

**Target:** 

Thrombopoietin Receptor

**Purity / Grade:** 

>98%

**Solubility:** 

DMSO : ≥ 32 mg/mL (49.26 mM)

**Alternative Names:** 

AKR-501; E5501; YM477

**Observed Molecular Weight:** 

649.65





## **Product Description**

Avatrombopag(AKR-501; AS1670542) is a novel orally-active thrombopoietin(TPO) receptor agonist with EC50 of 3.3 nM.

EC50 value: 3.3 nM [1]

Target: TPO receptor agonist

in vitro: AKR-501 specifically targeted the TPO receptor and stimulated megakaryocytopoiesis throughout the development and maturation of megakaryocytes just as rhTPO did. AKR-501, however, was shown to be effective only in humans and chimpanzees with high species specificity [1]. AS1670542 has 50% effective concentration values for cell proliferation with AS1670542 or eltrombopag were 1.9 and 13nM, respectively, while those for megakaryocyte colony formation from human cord blood CD34(+) cells with AS1670542 or eltrombopag were 260 and 950nM, respectively [2].

in vivo: Daily oral administration of AKR-501 dose-dependently increased the number of human platelets in in human platelet producing non-obese diabetic/severe combined immunodeficiency (NOD/SCID) mice transplanted with human fetal liver CD34(+) cells, with significance achieved at doses of 1 mg/kg and above. The peak unbound plasma concentrations of AKR-501 after administration at 1 mg/kg in NOD/SCID mice were similar to those observed following administration of an active oral dose in human subjects [1]. AS1670542 significantly increased the number of human platelets in non-obese diabetic/severe combined immunodeficiency (NOD/SCID) mice with transplanted human hematopoietic stem cells at 0.3 (P

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