

Palovarotene

Catalog No: tcsc2031



Available Sizes

Size: 5mg

Size: 10mg

Size: 100mg



Specifications

CAS No:

410528-02-8

Formula:

$C_{27}H_{30}N_2O_2$

Pathway:

Metabolic Enzyme/Protease

Target:

RAR/RXR

Purity / Grade:

>98%

Solubility:

DMSO : 19.5 mg/mL (47.04 mM; Need ultrasonic and warming)

Alternative Names:

R 667;Ro 3300074

Observed Molecular Weight:

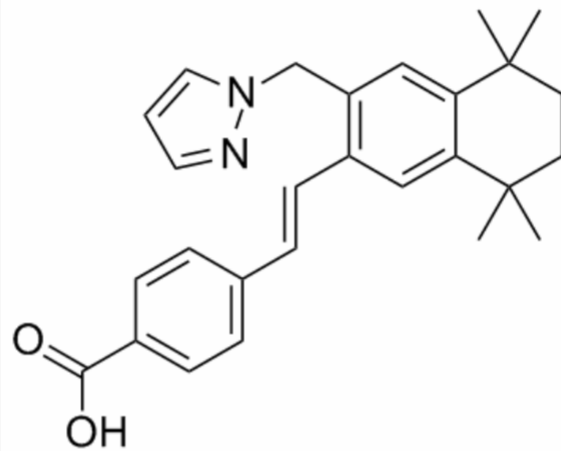
414.54

Product Description

Palovarotene is a nuclear retinoic acid receptor γ (**RAR- γ**) agonist.

IC50 & Target: RAR- γ ^[1]

In Vivo: Palovarotene suppresses post-traumatic chondrogenesis and osteogenesis and mitigated trauma-induced ectopic bone formation. Palovarotene inhibits subcutaneous and intramuscular heterotopic ossification (HO) in mice. Palovarotene is given orally for 14 days at 1 mg/kg/day starting on post-operative day (POD) 1 or POD-5, and HO amount, wound dehiscence and related processes are monitored for up to 84 days post injury. Compared to vehicle-control animals, Palovarotene significantly decreases HO by 50 to 60% regardless of when the treatment started and if infection is present^[1]. Starting from day 1 of injury, half of the Acvr1^{cR206H/+} mice are treated with Palovarotene by daily gavage for 14 days and the other half received vehicle as control. Analysis by mCT and 3D image reconstruction at day 14 shows that large HO tissue masses have formed in the targeted leg of Acvr1^{cR206H/+} mutant mice receiving vehicle, but HO formation is greatly diminished in Palovarotene-treated companions by more than 80% based on bone volume/total volume quantification^[2].



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