

# Doxercalciferol

## Catalog No: tcsc0395



### Available Sizes

**Size:** 2mg

**Size:** 5mg

**Size:** 10mg

**Size:** 25mg

**Size:** 50mg

**Size:** 100mg



### Specifications

**CAS No:**

54573-75-0

**Formula:**

$C_{28}H_{44}O_2$

**Pathway:**

Vitamin D Related

**Target:**

VD/VDR

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

1.alpha.-Hydroxyvitamin D2

### Observed Molecular Weight:

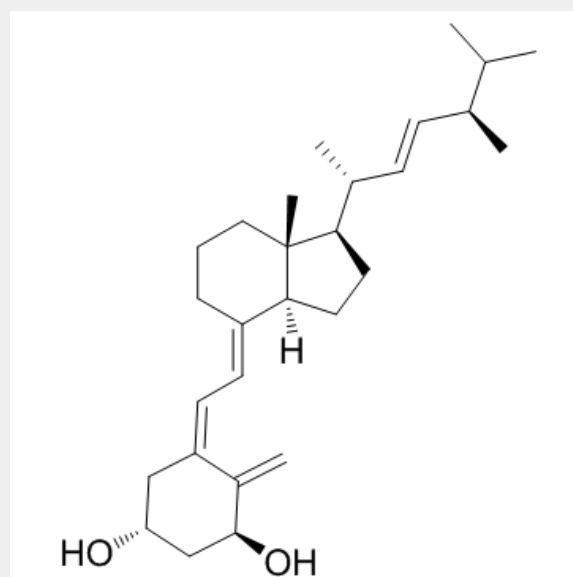
412.65

## Product Description

Doxercalciferol is a Vitamin D2 analog, acts as an activator of **Vitamin D receptor**, and prevent renal disease.

IC50 & Target: Vitamin D receptor<sup>[1]</sup>

**In Vivo:** Doxercalciferol (0.083, 0.167 or 0.333 µg/kg, i.p.) elevates serum phosphorus at Week 6 in 5/6 nephrectomized (NX) rats. Doxercalciferol (0.167 and 0.333 µg/kg) also increases serum calcium and Ca × P at Weeks 2 and 6, and enhances increased pulse wave velocity (PWV) at Week 6 in 5/6 nephrectomized (NX) rats. Doxercalciferol blocks PTH from rising at 0.083 µg/kg, and lowers serum PTH to the SHAM level<sup>[1]</sup>. Doxercalciferol (125 ng/kg, i.p. thrice per week) increases expression of VDR mRNA level and renal expression of TRPV5 in NON mice fed a HF diet. Doxercalciferol also improves proteinuria, prevents loss of podocytes, and accumulation of extracellular matrix proteins in HF diet-induced mice. Doxercalciferol inhibits the expression of profibrotic growth factors (TGF-β, PAI-1, and connective tissue growth factor (CTGF)), and blocks increased expression of the renin-angiotensin-aldosterone system in mice fed a HF diet. Furthermore, Doxercalciferol suppresses macrophage infiltration, decreases NF-kb activity, and prevents expression of proinflammatory cytokine and the increase in renal lipid accumulation in mice fed a HF diet<sup>[2]</sup>. Doxercalciferol (30 ng/kg, i.p. thrice per week) prevents albuminuria, markedly attenuates podocyte loss and apoptosis, and reduces glomerular fibrosis in streptozotocin-induced diabetic mice<sup>[3]</sup>.



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