5,6-trans-Vitamin D3

Cat. No.: HY-15398A

CAS No.: 22350-41-0

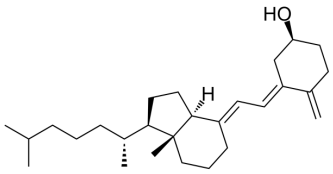
Molecular Formula: $C_{27}H_{44}O$

Molecular Weight: 384.64

Target: VD/VDR

Pathway: Vitamin D Related

Storage: -20°C, protect from light, stored under nitrogen
* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

Ethyl Acetate : ≥ 50 mg/mL (129.99 mM)
* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.5998 mL	12.9992 mL	25.9983 mL
	5 mM	0.5200 mL	2.5998 mL	5.1997 mL
	10 mM	0.2600 mL	1.2999 mL	2.5998 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

5,6-trans-Vitamin D3 (5,6-trans-Cholecalciferol;5,6-trans-Colecalciferol) is a photoproduct of vitamin D3[1]. Vitamin D3 is a naturally occuring form of vitamin D. Vitamin D3 induces cell differentiation and prevents proliferation of cancer cells.

In Vitro

Normal human keratinocytes in the cultured human keratinocytes by determining their influence on ^{3}H-thymidine incorporation into DNA.
5,6-trans-vitamin D3 only induces significant inhibition at $10^{(-6)}$ M. The dissociation constants of vitamin D receptor (VDR) for 5,6-trans-vitamin D3 is 560 nM[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. T C Chen, et al. An evaluation of the biologic activity and vitamin D receptor binding affinity of the photoisomers of vitamin D3 and previtamin D3. J Nutr Biochem. 2000 May;11(5):267-72.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA