LKT Laboratories, Inc.

25-Hydroxyvitamin D3

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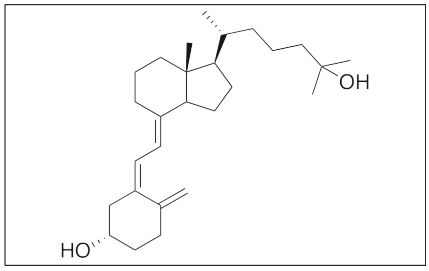
Product Information

Product ID H9815
CAS No. 19356-17-3
Chemical Name

Synonym Calcifediol, calcidiol, 25-hydroxycholecalciferol



Formula $C_{27}H_{44}O_2$
Formula Wt. 400.64
Melting Point
Purity ≥98%
Solubility

Bulk quanitites available upon request

Product ID	Size
H9815	1 mg
H9815	5 mg

Store Temp -20˚C
Ship Temp Ambient

Description 25-hydroxyvitamin D3 (25-OH D3), or calcidiol/calcifediol, is a pro-hormone for calcitriol that restores bone mineralization in vitamin D-deficient models. 25-OH D3 is the major circulating metabolite of vitamin D3. Vitamin D signaling also regulates Ca2+ homeostasis. 25-OH D3 activates the vitamin D receptor and also regulates transcription of hormones such as parathyroid hormone (PTH). In vivo, 25-OH D3 exhibits anti-inflammatory activity, improving diabetic periodontitis; 25-OH D3 decreases levels of serum glucose, glycosylated hemoglobin, and TNF-α and downregulates expression of toll-like receptor 4 (TLR4), JAK/STAT, and NF-κB. This compound also displays anticancer activity, as it inhibits cell growth in prostate cancer cells.

References

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