PRODUCT INFORMATION

Vitamin D₂
Item No. 11791

CAS Registry No.: 50-14-6
Formal Name: (1S)-4-methylene-3Z-[2E-([1R,3aS,7aR]-octahydro-7a-methyl-1-([1R,2E,4R]-1,4,5-trimethyl-2-hexen-1-yl]-4H-inden-4-ylidene)ethylidene]-cyclohexanol
Synonyms: Calciferol, Ergocalciferol, Fortodyl, Infron, Mulsiferol, NSC 62792, Radiostol, Uvesterol D
MF: C₂₈H₄₄O
FW: 396.7
Purity: ≥98%
UV/Vis.: λ_{max} = 212, 265 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Vitamin D₂ is supplied as a crystalline solid. A stock solution may be made by dissolving the vitamin D₂ in the solvent of choice, which should be purged with an inert gas. Vitamin D₂ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of vitamin D₂ in ethanol and DMF is approximately 20 mg/ml and approximately 2 mg/ml in DMSO.

Description

Vitamin D aids in the absorption of calcium and has central roles in bone formation and maintenance, hypertension, cancer and immunity.¹,² Vitamin D may be obtained from many dietary sources, including eggs and fish, and is synthesized in the skin by the conversion of 7-dehydrocholesterol to vitamin D₃ by ultraviolet light.³ Vitamin D₂ is produced in fungi, including yeast, and invertebrates from ergosterol in response to ultraviolet radiation. In vertebrates as well as host organisms, vitamin D₂ is metabolized first to 25-hydroxyvitamin D₂ and subsequently to the active 1,25-dihydroxyvitamin D₂.¹,⁴ Differences in the metabolism and action of vitamin D₂ vs. vitamin D₃ in mammals is a current topic of research interest.⁵

References