

Calcidiol (ID1-25B): sc-73499

BACKGROUND

Calcitriol, also known as 1,25-dihydroxyvitamin D₃ or 1,25(OH)₂ vitamin D₃, is the active metabolite of vitamin D. Calcitriol is a steroid hormone produced by the bioactivation of the constitutively produced intermediary metabolite Calcidiol, also referred to as 25-hydroxyvitamin D₃ (25(OH)D₃). This reaction is catalyzed in the kidney by the 1 α -OHase enzyme. Calcidiol is a prehormone that is produced by the metabolism of vitamin D. Calcitriol plays a role in the maintenance of serum calcium and phosphate homeostasis by binding to the vitamin D receptor (VDR) and changing the transcriptional rate of target genes. Calcitriol stimulates intestinal calcium and phosphate absorption, bone calcium and phosphate resorption, and renal calcium and phosphate reabsorption, actions which ensure the deposition of bone mineral. Calcitriol also contributes to inhibiting cellular proliferation, stimulating cellular differentiation and modulating the immune system.

REFERENCES

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SOURCE

Calcidiol (ID1-25B) is a mouse monoclonal antibody raised against Calcidiol-3-Hemisuccinate conjugated to BSA.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.1% stabilizer protein.

APPLICATIONS

Calcidiol (ID1-25B) is recommended for detection of Calcidiol, also designated 25-hydroxyvitamin-D₃ or 25-OH D₃ by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with 24,25-dihydroxyvitamin D₃.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.