SANTA CRUZ BIOTECHNOLOGY, INC.

Calcitriol (ID1-25A): sc-73498

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Calcitriol, also known as 1,25-dihydroxyvitamin D_3 or 1,25$(OH)_2$ vitamin D_3, 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 D_3 (25$(OH)D_3$). This reaction is catalyzed in the kidney by the 1α-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

Calcitriol (ID1-25A) is a mouse monoclonal antibody raised against Calcitriol-3-hemisuccinate conjugated to BSA.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of TBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Calcitriol (ID1-25A) is recommended for detection of Calcitriol, also designated 1,25-dihydroxyvitamin D_3 or 1,25(OH)2D3, by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.