

# Biotin (15D9): sc-73451

## BACKGROUND

Biotin, a water-soluble B complex vitamin, is required by all organisms but can only be synthesized by yeasts, molds, algae, some plant species and bacteria. Biotin, a tetrahydrothiophene ring fused with an ureido (tetrahydro-imidazole) ring, is important in the catalysis of essential metabolic reactions to synthesize fatty acids, to metabolize leucine and in gluconeogenesis. Human intestinal bacteria generally produce in excess of the body's daily Biotin requirement. The occurrence of Biotin in nature is widespread and, although extremely rare, Biotin deficiency is associated with dermatitis, nausea, loss of hair, depression, muscle pain and reproductive disturbances.

## REFERENCES

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## SOURCE

Biotin (15D9) is a mouse monoclonal antibody raised against full length Biotin.

## PRODUCT

Each vial contains 50 µg IgG<sub>2b</sub> in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Biotin (15D9) is recommended for detection of Biotin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:10-1:100), immunoprecipitation [1-2 µl per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution to be determined by researcher, dilution range 1:50-1:2500), immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range 1:50-1:2500) and solid phase ELISA (starting dilution to be determined by researcher, dilution range 1:100-1:5000); permits the formation of antibody-Biotin complexes, thus enhancing the sensitivity of the detection system; non cross-reactive with the free carrier protein.

## STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.



See **Biotin (BK-1/39): sc-53179** for Biotin antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.