

## D-Biotin

**Vitamin B7**

**Cell Culture Tested**

**Product Code: TC096**

### Product Description :

Molecular Weight: 244.31

Molecular Formula:  $C_{10}H_{16}N_2O_3S$

CAS No.:58-85-5

Synonym: Bios II, Coenzyme R, Vitamin B7, Vitamin H

Biotin, also known as vitamin H is a member of vitamin B complex family. It is involved in carbohydrate, amino acid, and lipid metabolism. It supplies prosthetic group in 4 mammalian carboxylase families and facilitates the binding and transfer of carbon dioxide across the membrane.

Biotin increases the uptake of glucose inside the cells. Biotin has extraordinary binding affinity to avidin and streptavidin. Use of biotin for non-radioactive labeling of proteins and nucleic acids has now become increasingly popular technique in life science research. The use of biotin conjugation has eliminated the hazards, instability and disposal problems associated with the use of radioisotopes.

It also serves as a regulator of cell signaling pathways and gene expression. Biotin plays a vital role in cell division and cell growth through its role in the manufacture of DNA and RNA.

In cell culture, biotin is used as a component of classical cell culture media as well as serum free media.

### Quality Control:

#### Appearance

White to Off-white powder.

#### Solubility

Clear colorless solution at 5gm in 100ml of 2M ammonium hydroxide solution.

#### pH of 0.02% solution in water

3.50 -4.50

#### Assay

NLT 99.00%

#### Cell Culture Test

Passes

### Storage and Shelf Life:

Store at 2°-8°C.

Shelf life is 36 months.

Use before the expiry date mentioned on the product label.

### Disclaimer :

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