Creative Enzymes®

Inositol

Cat. No. EXTZ-313

Lot. No. (See product label)

Introduction

Description

Inositol, also known as cyclohexanol, hexahydroxycyclohexane, cyclohexanol, carnosine, inositol, belongs to one of the B vitamins. In nature, it exists in free or combined form in all biological tissues, and is a commonly present component in animal and plant cells, which can be synthesized by microorganisms in the digestive tract, and participates in the metabolism of sugars and lipids in the body. In animals, it mainly exists in the form of phosphatidylinositol, and is most abundant in brain marrow, heart muscle and skeletal muscle. Phosphatidylinositol exists mainly in the form of phosphatidylinositol in plants, and can be combined with calcium, zinc, iron, etc. to form insoluble compounds, interfering with their digestion and absorption. Inositol deficiency in animal diets is associated with hair loss and developmental problems. Inositol is related to intracellular calcium metabolism, and its triphosphate derivatives can be released from lipid conjugates after the cell is stimulated to play the role of the second messenger, which can mobilize intracellular calcium ions and regulate many cellular activities, such as secretion, metabolism, phototransduction and cell division.

Applications

1. Health care field Women's Health: Improve symptoms of Polycystic Ovary Syndrome (PCOS), including regulating ovulation, improving hormone levels and insulin resistance. Mood Management: Helps relieve symptoms of anxiety, depression and panic and supports nervous system health. Lipid metabolism: To support cholesterol metabolism and reduce the risk of fatty liver. Fertility support: Commonly used to improve male sperm quality and female fertility. 2. Food additives Added to energy drinks and functional foods for improving body energy and metabolic health. Fortified nutritional supplement foods to support cardiovascular and neurological health. 3. Pharmaceuticals To assist in the treatment of psychological disorders such as anxiety and obsessive-compulsive disorder. Used in diabetes and metabolic syndrome patients to improve insulin sensitivity and blood glucose control. 4. Cosmetic field Moisturizing products: Inositol helps to maintain skin moisture and improve skin elasticity. Anti-aging skin care: By regulating cell metabolism, it slows down the aging process and brightens skin tone. Oil control care: Regulates sebum secretion, suitable for oily and combination skin types. 5. Animal Nutrition Promote animal growth and development, improve reproductive performance. Used as a co-factor for fat metabolism in feed.

Product Information

Appearance

It occors as fine, white crystals or as a white crystalline powder. It is odorless, has a sweet taste, and is stable in air. Its solutions are neutral to litrnus. It is optically inactive.

CAS No.

87-89-8

Molecular Formula

C6H12O6

Molecular Weight

180.16

Purity

97.0% ~102.0%

Function

Inositol is an indispensable and important component of the human body, which can promote fat and cholesterol metabolism, and has a significant effect on improving hyperlipidemia, fatty liver, and lowering serum lipids. Inositol is good for eye protection, and it can achieve the prevention of hair loss.

Usage and Packaging

Package	1kg aluminum foil vacuum bag

Storage and Shipping Information

Storage	Sealed, dark, at cool place