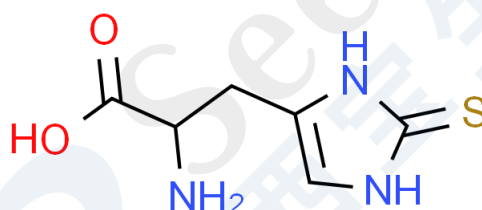


# L-Ergothioneine

## Product Information

- Product Name: L-Ergothioneine
- Alternative name: Ergothioneine, L-Ergothioneine, 2-thio-imidazole
- Cat.No: 497-30-3
- Source: Natural
- Purity: 98%
- Mol. Formula: C<sub>9</sub>H<sub>15</sub>N<sub>3</sub>O<sub>2</sub>S
- Mol. Weight: 229.3
- Appearance: White or off-white solid
- Solubility: Soluble in Water (up to 10 mg/ml)
- Packing: 100g, 1Kg, 25Kg
- Storage: -20°C
- Structural formula:



## Product Introduction

L-Ergothioneine (EGT, CAS: 497-30-3) is a rare chiral amino acid that has multiple cell physiological protective functions, including scavenging free radicals, detoxifying, maintaining DNA biosynthesis, and promoting Cells grow normally, strengthen the cellular immune system, provide anti-radiation, whitening and anti-aging properties. Due to its excellent performance, it finds applications across various fields. Specially in the realm of cosmetics, it serves as an effective anti-aging agent and can also be formulated into sunscreens and other products.

## Applications

### ■ Used as a unique antioxidant

Ergothioneine is a highly protective and nontoxic natural antioxidant that remains stable in water, enabling its concentration to reach millimolar levels in certain tissues. This, in turn, stimulates the natural antioxidant defense system of cells. Among a plenty of antioxidants, ergothioneine stands out as it has the unique ability to chelate heavy metal ions, thereby protecting red blood cells from the harmful effects of free radicals.

## ■ Used in organ transplantation

In organ transplantation, the storage capacity and duration of tissues are crucial factors in determining the success of the procedure. Glutathione, while commonly employed as an antioxidant in this context, is susceptible to oxidation when exposed to the environment. Even under cold storage or liquid conditions, its antioxidant capacity significantly diminishes, potentially leading to cellular toxicity, inflammation, and the hydrolysis of tissue proteins. Ergothiazine, however, stands as a stable aqueous solution antioxidant with the ability to chelate heavy metal ions. As such, it offers a promising alternative to glutathione in the realm of organ protection, enabling better preservation of transplanted organs.

## ■ Incorporate Ergothiazine into cosmetics as a skin protectant.

Ultraviolet UVA rays from sunlight have the ability to penetrate deep into the dermis of human skin, disrupting the growth of epidermal cells and causing premature aging due to the premature demise of surface cells. On the other hand, ultraviolet UVB rays pose a higher risk of leading to skin cancer. Ergothiazine's ability to minimize the formation of reactive oxygen species and safeguard cells from radiation damage makes it a suitable supplement to certain cosmetics, particularly those aimed at outdoor skin care and protective formulations.

## ■ Application in Ophthalmology

In recent years, ergothioneine has emerged as a crucial component in eye protection, raising interest among researchers in developing ophthalmic products that could enhance surgical treatments in this field. Ophthalmic surgeries are typically administered locally, and the water solubility and stability exhibited by ergothioneine offer promising potential for such procedures, thus possessing significant application value.

## ■ Application in food field

L-Ergothioneine has been officially recognized as a novel food in Europe, proving its safety in the food field. Relevant studies have estimated the daily intake of L-ergothioneine from novel food sources across all age groups and determined that it falls well below the safe level (NOAEL). Furthermore, research has highlighted the preventive benefits of L-ergothioneine in preventing abnormal embryo development in pregnant diabetic rats, further strengthening its role as an indicator for milk heat treatment. This comprehensive results of research firmly establish L-ergothioneine as a safe and effective ingredient in the food industry.

## ■ Application in other fields

Ergothiazine can be used in many fields because of its excellent performance. For example, it is used in the fields of medicine, food, health care products and cosmetics. Can be used for treating inflammation and the like in the medical field, and can be made into tablets, capsules, oral preparations and the like; It can prevent cancer in the field of health care products, and can be made into functional foods, functional drinks and other products, and can be used for anti-aging in the field of cosmetics, and can be made into sunscreen and other products.

## ■ Applications in Other Fields

Due to its outstanding properties, ergothioneine finds widespread application in various industries. For instance, it is utilized in medicine, food, healthcare products, and cosmetics. In the medical field, it can be employed in treating inflammation and similar conditions, and can be formulated into tablets, capsules, and oral preparations. In the realm of healthcare products, Ergothiazine can help prevent cancer and can be incorporated into functional foods, beverages, and other products. Within the cosmetics industry, it serves as an anti-aging agent and can be formulated into sunscreens and other products.

## Product List

We can provide high-quality L-Ergothioneine

Product name	Purity	Packling	Color
L-Ergothioneine	98%	100g, 1Kg, 25Kg	White or off-white solid



**Service Hotline:** 400-021-8158

**International Market:** [www.allinno.com](http://www.allinno.com)

**Website:** [www.seebio.com/](http://www.seebio.com/) [www.seebio.cn](http://www.seebio.cn)

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