

Coagulase

Product Number: CLE2000

Shipping and Storage

1. Transportation: By air or Refrigerated sea transportation.
2. Storage: Cold storage (2°C~ 8°C), avoid exposure to light.
3. Shelf life: 2 year with cold storage.
4. Package: 25kg /drum.

Description

Coagulase is derived from the *Kluyveromyces lactis* strain. It's a food grade enzyme which produced from submerged fermentation. The clotting of milk by coagulase can be divided into two stages. First, the enzyme specific hydrolysis the peptide bond in Phe105-Met106 from k-casein polypeptide chain in milk to form stable para-k casein. Second, para-k casein, α -casein and β -casein will precipitate to form clotting with the action of Ca^{+2} .

Application

This product is mainly used in cheese processing, which can make milk clotting.

Features

1. Appearance: White to light brown powder.
2. Standard enzyme activity: 20,000 IMCU/g.
3. Enzyme activity definition: Under the same chemical and physical conditions, the time required for the coagulase sample to produce visible clots in the standard milk which contain 0.5g/L calcium chloride ($\text{pH} \approx 6.5$), compare with the standard enzyme powder with known clotting activity.
4. Product standard: GB1886.174-2024 <National Food Safety Standard-Food Additives-Enzyme Preparations For Food Industry>.

Protocol

Add 2.25-2.5g Coagulase in 1000L milk, stir fully, waiting for 25-30 minutes at 32°C, then the milk will coagulate to meet the requirement of clotting.