

## Urease, Recombinant

Cat. No. NATE-0923

Lot. No. (See product label)

### Introduction

#### Description

Ureases, functionally, belong to the superfamily of amidohydrolases and phosphotriesterases. It is an enzyme that catalyzes the hydrolysis of urea into carbon dioxide and ammonia. The reaction occurs as follows:  $(\text{NH}_2)_2\text{CO} + \text{H}_2\text{O} \rightarrow \text{CO}_2 + 2\text{NH}_3$ .

#### Synonyms

Urease

### Product Information

#### Source

E. coli

#### Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

#### CAS No.

9002-13-5

#### Purity

Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Anion-exchange FPLC. (c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

#### Activity

141U/mg

#### Buffer

Each mg of protein contains 345µg Potassium Phosphate and 25µg EDTA Na2.

#### Unit Definition

One Unit oxidizes one micromole of NADH per minute at 25°C, at pH 7.6.

### Storage and Shipping Information

#### Stability

Lyophilized Urease although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution Urease should be stored at 4° C between 2-7 days and for future use below -18°C. For long-term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please avoid freeze-thaw cycles.