

## Trehalase 15A from *Mycobacterium smegmatis*, Recombinant

Cat. No. REMT-010

Lot. No. (See product label)

### Introduction

**Description** Trehalase is a glycoside hydrolase enzyme located in on the brush border of the small intestine that catalyzes the conversion of trehalose to glucose. It is found in most animals. The non-reducing disaccharide trehalose ( $\alpha$ -D-glucopyranosyl-1,1- $\alpha$ -D-glucopyranoside) is one of the most important storage carbohydrates, which is present in almost all forms of life except mammals. The disaccharide is hydrolyzed into two molecules of glucose by the enzyme trehalase. There are two types of trehalases found in *Saccharomyces cerevisiae*, viz. neutral trehalase (NT) and acid trehalase (AT) classified according to their pH optima. NT has an optimum pH of 7.0, while that of AT is 4.5. Recently it has been reported that more than 90% of total AT activity in *S. cerevisiae* is extracellular and cleaves extracellular trehalose into glucose in the periplasmic space.

### Product Information

<b>Species</b>	<i>Mycobacterium smegmatis</i>
<b>Source</b>	<i>E. coli</i>
<b>Form</b>	35 mM NaHepes buffer, pH 7.5, 750 mM NaCl, 200 mM imidazol, 3.5 mM CaCl <sub>2</sub> , 0.02% sodium azide and 25% (v/v) glycerol.
<b>EC Number</b>	EC 3.2.1.28
<b>CAS No.</b>	9025-52-9
<b>Purity</b>	>90%
<b>Concentration</b>	1 mg/mL

### Storage and Shipping Information

**Storage** at -20°C