

## Galactose Oxidase from *Dactylium dendroides*, Recombinant

Cat. No. NATE-1288

Lot. No. (See product label)

### Introduction

#### Description

Galactose oxidase is an extracellular copper-containing enzyme, secreted by the deuteromycete fungus *Dactylium dendroides*. It catalyzes the oxidation of a range of primary alcohols, including D-galactose, to the corresponding aldehyde, with reduction of oxygen to hydrogen peroxide.

#### Applications

GaO has been shown to be useful in a number of biotechnology and medical applications which include monitoring of galactose in blood and urine, paper strengthening additives, test strips for cancer diagnosis, biosensors and lactose detection, dental care and hair coloring and waving.

#### Synonyms

EC 1.1.3.9; D-galactose oxidase;  $\beta$ -galactose oxidase; 9028-79-9; Galactose Oxidase

### Product Information

#### Source

*Dactylium dendroides*

#### CAS No.

9028-79-9

#### Molecular Weight

68.9 kDa (Calculated)

#### Purity

>95% by SDS-PAGE

#### Activity

>1750 U/mg

#### Isoelectric point

8.34

#### Buffer

50 mM acetate pH 7.2, 10  $\mu$ M CuSO<sub>4</sub>

#### Unit Definition

One unit will produce a  $\Delta$ A425 of 1.0 per min at pH 6.0 at 25 °C, in a peroxidase and o-Tolidine system.

### Storage and Shipping Information

#### Storage

2-8°C. Avoid multiple freeze/thaw cycles.

#### Stability

3-6 months