Creative Enzymes®

# Native Mushroom Tyrosinase

*Cat. No. NATE-0726*

*Lot. No.* (See product label)

## Introduction

***Description*** Tyrosinase is a copper-containing oxidase, which has activity for both catechols and cresol. It is responsible for browning reactions. This enzyme is reported to have two binding sites for aromatic substrates and a different binding site for oxygen-copper.

***Applications*** Tyrosinase activity has been assessed in a study that developed an alternative therapeutic agent for treating hyperpigmentation. Tyrosinase has also been used in a study to investigate the ocul ocutaneous albinism phenotype in the Pakistani population.

***Synonyms*** Tyrosinase; EC 1.14.18.1; 9002-10-2; monophenol monooxygenase; phenolase; monophenol oxidase; cresolase; monophenolase; tyrosine-dopa oxidase; monophenol monooxidase; monophenol dihydroxyphenylalanine:oxygen oxidoreductase; N-acetyl-6-hydroxytryptophan oxidase; monophenol, dihydroxy-L-phenylalanine oxygen oxidoreductase; o-diphenol:O2 oxidoreductase; phenol oxidase

## Product Information

| | |
|---|---|
| ***Source*** | Mushroom |
| ***Form*** | lyophilized powder |
| ***EC Number*** | EC 1.14.18.1 |
| ***CAS No.*** | 9002-10-2 |
| ***Molecular Weight*** | 128 kDa by sedimentation velocity diffusion; 133 kDa by light-scattering measurements, and 119.5 kDa by electrophoresis. |
| ***Activity*** | 700 unit/mg solid |
| ***Isoelectric point*** | 4.7-5 |
| ***Optimum pH*** | 6-7 |
| ***Unit Definition*** | One unit = ΔA280 of 0.001 per min at pH 6.5 at 25°C in 3 mL reaction mix containing L-tyrosine. |

## Storage and Shipping Information

| | |
|---|---|
| ***Storage*** | −20°C |