Creative Enzymes®

Native Sinapis alba (white mustard) seed Thioglucosidase

Cat. No. NATE-0468

Lot. No. (See product label)

Introduction

Description	Myrosinases are present in many bacteria, fungi, and edible plants, including those of the Brassicaceae (Cruciferae) family. The enzyme hydrolyzes the S-glucosidic bond of a glucosinolate substrate to form an unstable aglycone that rearranges with the loss of sulfate primarily to the isothiocyanate, though thiocyanates and nitriles are also formed. Many of the isothiocyanate products of aliphatic and aromatic glucosinolates have cancer chemopreventive properties.
Applications	Thioglucosidase has been used in a study to assess Brassica species screening for glucosinolate content. Thioglucosidase has also been used in a study to investigate a negative regulatory role for auxin in sulphate deficiency response in Arabidopsis thaliana.
Synonyms	thioglucosidase; EC 3.2.1.147; myrosinase; sinigrinase; sinigrase; Glucosinolase; Thioglucoside glucohydrolase; 9025-38-1

Product Information

Species	Sinapis alba
Source	Sinapis alba (white mustard) seed
EC Number	EC 3.2.1.147
CAS No.	9025-38-1
Activity	> 100 units/g solid
Unit Definition	One unit will produce 1.0 µmole glucose per min from sinigrin at pH 6.0 at 25°C.

Storage and Shipping Information

Storage	−20°C