

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 μ mole glucose per min from sinigrin at pH 6.0 at 25°C.

Storage and Shipping Information

Storage -20°C