Creative Enzymes®

Native Helix pomatia Sulfatase

Cat. No. NATE-0687

Lot. No. (See product label)

Introduction

Description

Sulfatases EC 3.1.6.1 are enzymes of the esterase class that catalyze the hydrolysis of sulfate esters. These may be found on a range of substrates, including steroids, carbohydrates and proteins. Sulfate esters may be formed from various alcohols and amines. In the latter case the resultant N-sulfates can also be termed sulfamates. Sulfatases play important roles in the cycling of sulfur in the environment, in the degradation of sulfated glycosaminoglycans and glycolipids in the lysosome, and in remodelling sulfated glycosaminoglycans in the extracellular space. Together with sulfotransferases, sulfatases form the major catalytic machinery for the synthesis and breakage of sulfate esters.

Applications

Sulfatase from Helix pomatia has been used in a study to develop a bioassay based screening of steroid derivatives in animal feed and supplements. Sulfatase from Helix pomatia has also been used in a study to inform new aspects of 17α-estradiol metabolism in man.

Synonyms

EC 3.1.6.1; 9016-17-5; sulfatase; nitrocatechol sulfatase; phenolsulfatase; phenylsulfatase; p-nitrophenyl sulfatase; arylsulfohydrolase; 4-methylumbelliferyl sulfatase; estrogen sulfatase; arylsulfatase

Product Information

Source

Helix pomatia

Form

Type I, powder; Type II, aqueous solution.

EC Number

EC 3.1.6.1

CAS No.

9016-17-5

Activity

Type I, > 10 ,000 units/g solid; Type II, > 2 ,000 units/mL.

Unit Definition

One unit will hydrolyze 1.0 μmole of p-nitrocatechol sulfate per hour at pH 5.0 at 37°C (30 min assay).

Storage and Shipping Information

Storage

−20°C