Creative Enzymes®

Native Aerobacter aerogenes Sulfatase

Cat. No. NATE-0686

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 Aerobacter aerogenes has been used in a study to assess formation of tyrosine O-sulfate by mit ochondria and chloroplasts of Euglena.

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 Aerobacter aerogenes

Form buffered aqueous glycerol solution; Solution in 50% glycerol containing 0.01 M Tris, pH 7.5.

EC Number EC 3.1.6.1

CAS No. 9016-17-5

Activity 2-5 units/mg protein (biuret), 10-20 units/mL

Concentration 10-20 units/mL

Unit Definition One unit will hydrolyze 1.0 µmole of p-nitrophenyl sulfate per min at pH 7.1 at 37°C.

Storage and Shipping Information

Storage −20°C