Creative Enzymes®

Native Abalone Sulfatase

Cat. No. NATE-0685

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 abalone entrails has been used in a study to determine that human p-selectin glycoprotein ligand-1 interacts with the skin-ass ociated chemokine CCL27 via sulfated tyrosines at the PSGL-1 amino terminus. Sulfatase from abalone entrails has also been used in a study to investigate HPLC of sulfate and glutathione conjugates from hamster embryo fibroblasts.
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

Species	Abalone
Source	Abalone entrails
Form	lyophilized powder
EC Number	EC 3.1.6.1
CAS No.	9016-17-5
Activity	20-40 units/mg solid
Unit Definition	One unit will hydrolyze 1.0 μmole of p-nitrocatechol sulfate per hr at pH 5.0 at 37°C (30 min assay).

Storage and Shipping Information

Storage	−20°C