

Product Information

Sulfatase from *Helix pomatia*

Type H-1

Catalog Number **S9626**

Storage Temperature $-20\text{ }^{\circ}\text{C}$

CAS RN 9016-17-5

EC 3.1.6.1

Synonyms: Aryl-sulfatase, Aryl-sulfate sulfohydrolase, Phenolsulfatase

Product Description

Sulfonation and sulfation are important processes in the metabolism of compounds such as hormones, neurotransmitters, and drugs.^{1,2} Sulfonation and sulfation are catalyzed by various sulfotransferases. In turn, desulfonation and desulfation occur via the action of sulfatase.

Several sulfatases occur in *Helix pomatia* (also known as Roman Snail).³⁻⁶ Early studies indicated the presence of at least two such sulfatases.^{3,4} One publication on two sulfatases isolated from *Helix pomatia* indicated molecular mass values of ~ 85 kDa by gel filtration chromatography. More recent work has postulated that *Helix pomatia* contains at least three sulfatases.⁶

In vitro, this *Helix pomatia* sulfatase product has been used for deconjugation studies of various compounds, including:

- Environmental contaminants, e.g., bisphenol A⁷
- Hirudin⁸
- Vitamin E metabolites⁹
- β -adrenoreceptor agonists¹⁰
- Lignans from carob germ and carob seed¹¹

This product is a lyophilized powder. It is known to contain β -glucuronidase activity. For this reason, β -glucuronidase activity of this product is also determined.

Sulfatase activity: $\geq 10,000$ units/g solid

Unit definition: One unit will hydrolyze 1.0 μmole of *p*-nitrocatechol sulfate per hour at pH 5.0 at $37\text{ }^{\circ}\text{C}$, in a 30 minute assay.

Preparation Instructions

One publication reports preparation of solutions of this sulfatase product at 100 units/mL in 200 mM sodium acetate buffer with 20 mM saccharic acid 1,4-lactone.¹²

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

References

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