## SIGMA-ALDRICH®

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# **Product Information**

#### Sulfatase from Helix pomatia

Type H-2, aqueous solution

Catalog Number **S9751** Storage Temperature 2–8 °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.<sup>1,2</sup> 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).<sup>3-6</sup> Early studies indicated the presence of at least two such sulfatases.<sup>3,4</sup> One publication on two sulfatases isolated from *Helix pomatia* indicated molecular mass values of ~85 kDa by gel filtration chromatography.<sup>5</sup> More recent work has postulated that *Helix pomatia* contains at least three sulfatases.<sup>6</sup>

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

- Hirudin<sup>7</sup>
- Isoflavones, e.g. daidzein, equol, genistein<sup>8</sup>
- Benzo[a]pyrene metabolites<sup>9</sup>
- Bile acids<sup>1</sup>

This product is known to contain  $\beta$ -glucuronidase activity. For this reason,  $\beta$ -glucuronidase activity of this preparation is also determined.

Sulfatase activity: ≥2,000 units/mL

Unit definition: One unit will hydrolyze 1.0  $\mu$ mole of *p*-nitrocatechol sulfate per hour at pH 5.0 at 37 °C, in a 30 minute assay.

#### **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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