

Product Information

Sulfatase from *Aerobacter aerogenes*

Type VI, buffered aqueous glycerol solution

Catalog Number **S1629**

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.

Sulfatase from *Aerobacter aerogenes* (known also as *Enterobacter aerogenes*³ and as *Klebsiella pneumoniae*⁴) has been reported to have a molecular mass of ~41 kDa, by sedimentation equilibrium studies.⁵ *In vitro*, sulfatase from *Aerobacter aerogenes* has been used for deconjugation of various compounds, including:

- Mycotoxin metabolites, e.g. sterigmatocystin⁶
- Prodrugs, e.g. etoposide 4'-sulfate⁷
- Environmental pollutants and related metabolites⁸
- Quercetin glycosides⁹

This product is a buffered aqueous solution in 50% glycerol with 0.01 M Trizma[®]-HCl, pH 7.5. This product is known to contain β -glucuronidase activity. For this reason, β -glucuronidase activity of this preparation is also determined.

Unit definition: One unit will hydrolyze 1.0 μ mole of *p*-nitrophenyl sulfate per minute at pH 7.1 at 37 $^{\circ}\text{C}$.

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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6. Olson, J.J., and Chu, F.S., *J. Agric. Food Chem.*, **41(2)**, 250-255 (1993).
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