

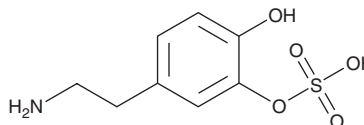
# PRODUCT INFORMATION



## Dopamine 3-O-Sulfate

Item No. 34129

**CAS Registry No.:** 51317-41-0  
**Formal Name:** 4-(2-aminoethyl)-1,2-benzenediol 2-(hydrogen sulfate)  
**Synonyms:** DA-3S, Dopamine 3-Sulfate  
**MF:** C<sub>8</sub>H<sub>11</sub>NO<sub>5</sub>S  
**FW:** 233.2  
**Purity:** ≥95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Dopamine 3-O-sulfate is supplied as a solid. A stock solution may be made by dissolving the dopamine 3-O-sulfate in the solvent of choice, which should be purged with an inert gas. Dopamine 3-O-sulfate is slightly soluble in methanol and DMSO.

### Description

Dopamine 3-O-sulfate is a metabolite of the endogenous catecholamine dopamine (Item No. 21992).<sup>1</sup> It is formed from dopamine by the sulfotransferase (SULT) isoform SULT1A3.<sup>2</sup> Dopamine 3-O-sulfate is found at higher levels in the brain and circulation than dopamine 4-O-sulfate.<sup>1,2</sup>

### References

1. Suominen, T., Uutela, P., Ketola, R.A., *et al.* Determination of serotonin and dopamine metabolites in human brain microdialysis and cerebrospinal fluid samples by UPLC-MS/MS: Discovery of intact glucuronide and sulfate conjugates. *PLoS One* **8(6)**, e68007 (2013).
2. Itäaho, K., Alakurtti, S., Yli-Kauhaluoma, J., *et al.* Regioselective sulfonation of dopamine by SULT1A3 in vitro provides a molecular explanation for the preponderance of dopamine-3-O-sulfate in human blood circulation. *Biochem. Pharmacol.* **74(3)**, 504-510 (2007).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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