

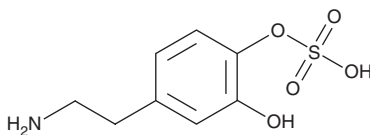
PRODUCT INFORMATION



Dopamine 4-O-Sulfate

Item No. 36085

CAS Registry No.: 38339-02-5
Formal Name: 1-(hydrogen sulfate)4-(2-aminoethyl)-1,2-benzenediol
Synonyms: DA-4S, Dopamine 4-Sulfate
MF: C₈H₁₁NO₅S
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 4-O-sulfate is supplied as a solid. A stock solution may be made by dissolving the dopamine 4-O-sulfate in the solvent of choice, which should be purged with an inert gas. Dopamine 4-O-sulfate is slightly soluble in DMSO.

Description

Dopamine 4-O-sulfate is an inactive metabolite of the catecholamine dopamine (Item No. 21992).^{1,2} It is formed from dopamine by the sulfotransferase (SULT) isoform SULT1A3.³ Dopamine 4-O-sulfate is found at lower levels in the brain and circulation than dopamine 3-O-sulfate (Item No. 34129).^{1,3}

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. Kyncl, J.J., Buckner, S.A., Brondyk, H., *et al.* Adrenergic and dopaminergic properties of dopamine sulfoconjugates. *J. Cardiovasc. Pharmacol.* **7(6)**, 1198-1204 (1985).
3. Itäaho, K., Alakurtti, S., Yli-Kauhahuoma, 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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