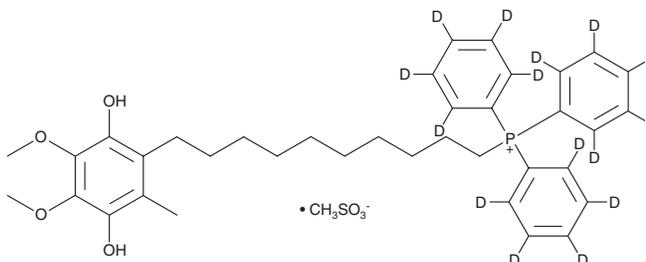


PRODUCT INFORMATION



Mitoquinol-d₁₅ Item No. 34310

Formal Name: [10-(2,5-dihydroxy-3,4-dimethoxy-6-methylphenyl)decyl]triphenyl-d₅-phosphonium, monomethanesulfonate
MF: C₃₇H₃₁D₁₅O₄P • CH₃O₃S
FW: 695.9
Chemical Purity: ≥95% (Mitoquinol)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₁₅); ≤1% d₀
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

Mitoquinol-d₁₅ is intended for use as an internal standard for the quantification of mitoquinol by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Mitoquinol-d₁₅ is supplied as a solid. A stock solution may be made by dissolving the mitoquinol-d₁₅ in the solvent of choice, which should be purged with an inert gas. Mitoquinol-d₁₅ is slightly soluble in chloroform and DMSO.

Description

Mitoquinol is a mitochondria-targeted antioxidant and reduced form of mitoquinone.¹ It reduces hydrogen peroxide production in succinate-fueled isolated bovine aortic endothelial mitochondria.²

References

1. Kelso, G.F., Porteous, C.M., Coulter, C.V., *et al.* Selective targeting of a redox-active ubiquinone to mitochondria within cells. Antioxidant and antiapoptotic properties. *J. Biol. Chem.* **276**(7), 4588-4596 (2001).
2. O'Malley, Y., Fink, B.D., Ross, N.C., *et al.* Reactive oxygen and targeted antioxidant administration in endothelial cell mitochondria. *J. Biol. Chem.* **281**(52), 39766-39775 (2006).

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.

WARRANTY AND LIMITATION OF REMEDY

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM