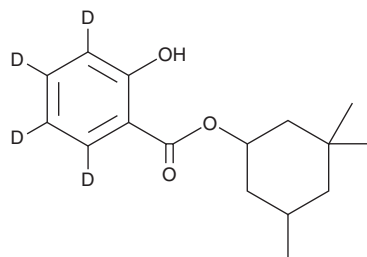


PRODUCT INFORMATION



Homosalate-d₄ Item No. 42536

Formal Name: 3,3,5-trimethylcyclohexyl
2-hydroxybenzoate-3,4,5,6-d₄
MF: C₁₆H₁₈D₄O₃
FW: 266.4
Chemical Purity: ≥95% (Homosalate)
Deuterium
Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀
Supplied as: A 5 mg/ml solution in methyl acetate
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Homosalate-d₄ is intended for use as an internal standard for the quantification of homosalate 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).

Homosalate-d₄ is supplied as a solution methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Homosalate-d₄ is sparingly soluble (1-10 mg/ml) in chloroform.

Description

Homosalate is a filter for UVB radiation.¹ It reduces ear edema induced by phorbol 12-myristate 13-acetate (PMA; Item No. 10008014) by 82.5 and 70% before and after UV irradiation, respectively, in mice.² Homosalate has androgenic and antiandrogenic activities in reporter assays using *S. cerevisiae* expressing the human androgen receptor (EC₅₀s = 170 and 107 μM, respectively).² It also has anti-estrogenic activity in a reporter assay using *S. cerevisiae* expressing human estrogen receptor α (ERα; EC₅₀ = 2,060 μM). Formulations containing homosalate have been used as sun protectants in sunscreen products.

References

1. Holt, E.L., Krokidi, K.M., Turner, M.A.P., *et al.* Insights into the photoprotection mechanism of the UV filter homosalate. *Phys. Chem. Chem. Phys.* **22**(27), 15509-15519 (2020).
2. Couteau, C., Couteau, O., Chauvet, C., *et al.* The effect of ultraviolet radiation on the anti-inflammatory effect of filters. *Int. J. Pharm.* **452**(1-2), 124-127 (2013).

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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