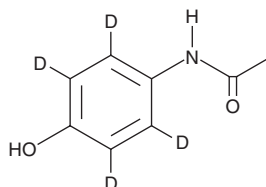


PRODUCT INFORMATION

Acetaminophen-d₄

Item No. 18245

CAS Registry No.: 64315-36-2
Formal Name: N-(4-hydroxyphenyl-2,3,5,6-d₄)-acetamide
Synonyms: 4-Acetamidophenol-d₄, APAP-d₄, 4'-Hydroxyacetanilide-d₄
MF: C₈H₅D₄NO₂
FW: 155.2
Chemical Purity: ≥98% (Acetaminophen)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀
UV/Vis.: λ_{max}: 249 nm
Supplied as: A crystalline 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

Acetaminophen-d₄ is intended for use as an internal standard for the quantification of acetaminophen (Item No. 10024 | 22629) 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).

Acetaminophen-d₄ is supplied as a crystalline solid. A stock solution may be made by dissolving the acetaminophen-d₄ in the solvent of choice, which should be purged with an inert gas. Acetaminophen-d₄ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of acetaminophen-d₄ in ethanol and DMF is approximately 25 mg/ml and approximately 20 mg/ml in DMSO.

Description

Acetaminophen is an analgesic and antipyretic compound that inhibits COX-2 activity by more than 80%, albeit at relatively high doses, while it is less effective against COX-1.¹ Acetaminophen-d₄ is also available as an analytical reference standard (Item No. 22645)

Reference

1. Hinz, B., Cheremina, O., and Brune, K. Acetaminophen (paracetamol) is a selective cyclooxygenase-2-inhibitor in man. *FASEB J.* **22**, 383-390 (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.

WARRANTY AND LIMITATION OF REMEDY

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