

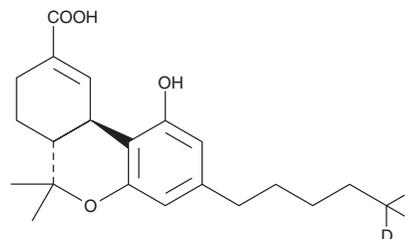
# PRODUCT INFORMATION



## (-)-11-nor-9-carboxy- $\Delta^9$ -THC-d<sub>3</sub> (exempt preparation)

Item No. 10009898

**CAS Registry No.:** 130381-15-6  
**Formal Name:** 6aR,7,8,10aR-tetrahydro-1-hydroxy-6,6-dimethyl-3-pentyl-6H-dibenzo[b,d]pyran-9-carboxylic acid-5,5,5-d<sub>3</sub>  
**Synonym:** (-)-11-nor-9-carboxy- $\Delta^9$ -Tetrahydrocannabinol-d<sub>3</sub>  
**MF:** C<sub>21</sub>H<sub>25</sub>D<sub>3</sub>O<sub>4</sub>  
**FW:** 347.5  
**Chemical Purity:**  $\geq 99\%$  (-)-11-nor-9-carboxy- $\Delta^9$ -THC (exempt preparation)  
**Deuterium Incorporation:**  $\geq 99\%$  deuterated forms (d<sub>1</sub>-d<sub>3</sub>);  $\leq 1\%$  d<sub>0</sub>  
**Supplied as:** A solution in methanol  
**Storage:** -20°C  
**Stability:** As supplied, 1 year from the QC date provided on the Certificate of Analysis, when stored properly



### Description

(-)-11-nor-9-carboxy- $\Delta^9$ -THC-d<sub>3</sub> (exempt preparation) (Item No. 10009898) is intended for use as an internal standard for the quantification of (-)-11-nor-9-carboxy- $\Delta^9$ -THC (exempt preparation) (Item No. 10009897) 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).

$\Delta^9$ -Tetrahydrocannabinol ( $\Delta^9$ -THC), the active constituent of marijuana, is metabolized primarily by hydroxylation at the allylic C-11 position followed by oxidation to (-)-11-nor-9-carboxy- $\Delta^9$ -THC. (-)-11-nor-9-carboxy- $\Delta^9$ -THC is the major metabolite of  $\Delta^9$ -THC and is used as an internal standard in various analytical procedures to unequivocally confirm its presence in biological fluids.<sup>1</sup>

### References

1. Siegel, C., Gordon, P.M., Uliss, D.B., *et al.* Synthesis of racemic and optically active  $\Delta^9$ -tetrahydrocannabinol (THC) metabolites. *J. Org. Chem.* **56(24)**, 6865-6872 (1991).

#### 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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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