

# Drug Metabolite Certified Reference Materials



Drug metabolites play a major role in identifying, confirming, and quantifying drugs of abuse. They are often the only remaining evidence of a rapidly metabolized drug, and their predictive fragmentation patterns provide much needed clues for identifying unknowns. Cayman Chemical offers Certified Reference Materials (CRMs) for many of the major metabolites of opioids, benzodiazepines, stimulants, cannabinoids, and more. Our CRMs meet ISO/IEC 17025 and ISO 17034 standards and are sold as quantitative solutions in sealed ampules.

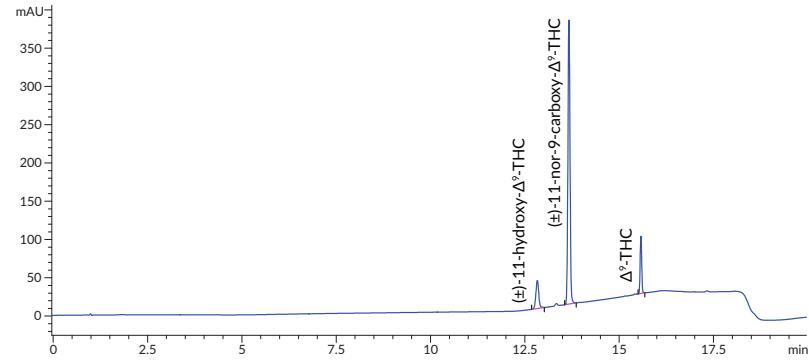
## Featured CRM Mixture

### $\Delta^9$ -THC Metabolite Mixture (CRM)

Item No. 33167

A 1 ml solution in methanol containing:

- ( $\pm$ )-11-hydroxy- $\Delta^9$ -THC (100  $\mu$ g/ml)
- ( $\pm$ )-11-nor-9-carboxy- $\Delta^9$ -THC (500  $\mu$ g/ml)
- $\Delta^9$ -THC (100  $\mu$ g/ml)



## Phytocannabinoid Metabolites

Item No.	Product Name
34023	( $-$ )-11-hydroxy- $\Delta^8$ -THC (CRM)
34024	( $-$ )-11-nor-9-carboxy- $\Delta^8$ -THC (CRM)
33076	( $-$ )-7-hydroxy Cannabidiol (CRM)
21667	( $\pm$ )-11-hydroxy- $\Delta^9$ -THC (CRM)
20754	( $\pm$ )-11-nor-9-carboxy- $\Delta^9$ -THC (CRM)

See all parent compounds and internal standards at [www.caymanchem.com](http://www.caymanchem.com)

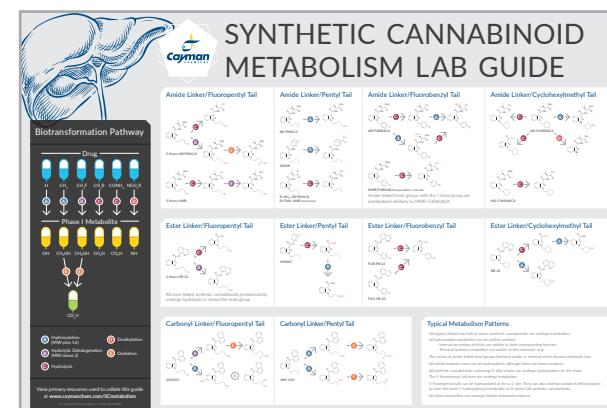
## Synthetic Cannabinoid Metabolites

Item No.	Product Name
17771	AB-FUBINACA metabolite 3 (CRM)
18789	5-fluoro AMB metabolite 7 (CRM)
28187	4-fluoro MDMB-BUTINACA butanoic acid metabolite (CRM)
28232	4-fluoro MDMB-BUTINACA N-(4-hydroxybutyl) metabolite (CRM)
26318	5-fluoro PB-22 3-carboxyindole metabolite (CRM)

See all parent compounds and internal standards at [www.caymanchem.com](http://www.caymanchem.com)

## Synthetic Cannabinoid Metabolism Lab Guide Poster

Request the lab guide designed to help identify clinically relevant metabolites from several major classes of synthetic cannabinoids.



Download or request the physical poster at  
[www.caymanchem.com/literature](http://www.caymanchem.com/literature)

Custom Mixtures, Screening Libraries, and Plates Available  
Email [sales@caymanchem.com](mailto:sales@caymanchem.com) to discuss your specific project needs

## Synthetic Opioid Metabolites

Item No.	Product Name
ISO60130	Acetyl norfentanyl (hydrochloride) (CRM)
22700	4-ANPP (CRM)
19561	Butyryl norfentanyl (hydrochloride) (CRM)
18751	O-Desmethyl-cis-tramadol (hydrochloride) (CRM)
26428	Despropionyl para-Fluorofentanyl (CRM)
ISO60195	Norfentanyl (CRM)
19559	Furanyl norfentanyl (hydrochloride) (CRM)
22182	Norcarfentanil (hydrochloride) (CRM)
20899	Normeperidine (hydrochloride) (CRM)

See all parent compounds and internal standards at [www.caymanchem.com](http://www.caymanchem.com)

## Benzodiazepine Metabolites

Item No.	Product Name
25517	$\alpha$ -hydroxy Alprazolam (CRM)
20225	7-Aminoclonazepam (CRM) *
19053	7-Aminoflunitrazepam (CRM) *
19293	7-Aminonimazepam (CRM)
19698	Desalkylflurazepam (CRM) *
18888	N-Desmethylclobazam (CRM)
23982	N-Desmethylflunitrazepam (CRM)
ISO60202	Lorazepam (CRM)
27242	Nifoxipam (CRM)
ISO60174	Nordiazepam (CRM) *
ISO60173	Oxazepam (CRM) *

\* Labeled standard also available

See all parent compounds and internal standards at [www.caymanchem.com](http://www.caymanchem.com)

## Opiate Metabolites

Item No.	Product Name
19418	6-Acetylmorphine (CRM)
25669	6 $\beta$ -Hydromorphol (CRM)
ISO60146	Hydromorphone (CRM)
20127	Norbuprenorphine (CRM)
22661	Norhydrocodone (hydrochloride) (CRM)
ISO60171	Oxymorphone (CRM)
25938	6 $\alpha$ -Oxycodol (CRM)
25939	6 $\beta$ -Oxycodol (CRM)
25940	6 $\alpha$ -Oxymorphol (CRM)

See all parent compounds and internal standards at [www.caymanchem.com](http://www.caymanchem.com)

## Benzodiazepine Metabolism Lab Guide Poster

Request our wall poster designed to help labs identify clinically relevant phase I and II benzodiazepine metabolites.

