



M3[®] line Hair Analysis

Products and methods to research drugs of abuse, psychotropic substances, therapeutic drugs and Ethyl Glucuronide in keratin matrix adopting LC/MS/MS and GC/MS techniques



Collect the
keratin sample



Weigh 25 mg
of washed and
chopped hair



Add 0,5 ml of
M3 Reagent



Digest for
1 hour at 100°C



Inject directly in LC/MS/MS
(or carry out SPE or Liq-Liq
treatment for GC/MS)



Report the results

DRUGS OF ABUSE, THERAPEUTIC DRUGS AND ETHYL GLUCURONIDE IN HAIR

The Comedical M3 Line consists of a series of products including M3 Reagent, Calibrators, Controls and Analytical Procedures aimed to the measurement, with LC/MS/MS and GC/MS techniques, of drugs of abuse, psychotropic substances, therapeutic drugs and Ethyl Glucuronide as marker of alcohol abuse, accumulated in the keratin matrix during the growth. Our proposed hydrolysis process at 100° C does not transform the extracted analytes. So they are dosed just how they have accumulated. Dependently of substance, recovery is comparable with or higher than that obtained with traditional extraction techniques. After extraction, the sample is clean and it can be directly injected in LC/MS/MS (preferably after dilution). Alternatively, it can be purified with SPE column or through a liquid-liquid extraction and analyzed in GC/MS or GC/MS/MS.

FEATURES AND ADVANTAGES

- Simultaneous extraction of drugs of abuse, therapeutic drugs, psychotropic substances and Ethyl Glucuronide
- No transformation of extracted analytes
- Simple and quick procedure, 1 hour at 100°C, starting from the chopped hair sample
- Excellent recovery of extracted analytes, better than traditional methanol extraction
- Dosage of the extracted analytes with direct injection in LC/MS/MS or, after purification, in GC/MS
- Standardization of sample preparation and extraction process
- Excellent analytical reproducibility thanks to less manual steps required

Appearance and permanence of the substances in biological matrices



(SAMHSA, DATIA, EWDTS)

M3 Reagent

REF SSM3000125 M3 Reagent

Pack size: 2 x 12,5 mL - for 50 samples

REF SSM3000300 M3 Reagent

Pack size: 2 x 300 mL - for 1.200 samples

REF SSM300025000 M3 Reagent

Pack size: 1 x 2.500 mL - for 5.000 samples

Direct extraction: 6-o-Monoacetylmorphine, Morphine, Codeine, Cocaine, Benzoyllecgonine, Cocaethylene, Ecgonine methylester, Amphetamine, Methamphetamine, MDMA (Ecstasy) - 3,4-methylenedioxy-N-methylamphetamine, MDA - 3,4-Methylenedioxyamphetamine, MDEA - 3,4-Methylenedioxy-N-ethylamphetamine, THC - Δ^9 -Tetrahydrocannabinol, THC-COOH - 11-nor- Δ^9 -Tetrahydrocannabinol-9-carboxylic acid, CBN - Cannabinol, CBD - Cannabidiol, Methadone, Buprenorphine, Norbuprenorphine, Clobazam, Ketamine, Norketamine and EtG - Ethyl Glucuronide.

Solvent M3 S1-S2

REF SSTM312000365 Solvent M3 S1-S2

Pack size: 1 x 6,5 mL + 1 x 300 mL

Solvent kit ready to use, specific for Liquid - Liquid treatment in the keratin matrix extraction process with M3 Reagent.

Cal M3 Calibrators

REF SSCALM3000006 CAL M3 BST Calibrators

Pack size: 5 concentration levels 3 x 0,6 mL each:

6-o-Monoacetylmorphine, Morphine, Codeine, Cocaine, Benzoyllecgonine, Cocaethylene, Ecgonine methylester, Amphetamine, Methamphetamine, MDMA (Ecstasy) - 3,4-methylenedioxy-N-methylamphetamine, MDA - 3,4-Methylenedioxyamphetamine, MDEA - 3,4-Methylenedioxy-N-ethylamphetamine, THC - Δ^9 -Tetrahydrocannabinol, THC-COOH - 11-nor- Δ^9 -Tetrahydrocannabinol-9-carboxylic acid, CBN - Cannabinol, CBD - Cannabidiol, Methadone, Buprenorphine, Norbuprenorphine, Clobazam, Ketamine and Norketamine.

REF SSCALM3001004 CAL M3 EtG Calibrators

Pack size: 5 concentration levels 3 x 0,4 mL each:

EtG - Ethyl Glucuronide.

REF SSCALM3002006 CAL M3 THC-COOH Calibrators **NEW!**

Pack size: 5 concentration levels 3 x 0,6 mL each:

THC-COOH - 11-nor- Δ^9 -Tetrahydrocannabinol-9-carboxylic acid.

TricoCheck Controls

Family of products designed to check the whole analytical process. There are different control lines developed for confirmation methods and screening techniques. The controls are realized by using authentic hair, washed, chopped and INCORPORATED with the specified substances. All TricoCheck Comedical controls can be treated as routine hair samples: further decontaminated through techniques and products described in the literature and extracted as defined by international guidelines for the hair testing with clinical and forensic purposes. The concentrations of the substances are expressed per analyte in the TricoCheck Controls for confirmation, and per class in the TricoCheck Controls for immunometric screening.

See the product leaflet for codes and other information about TricoCheck confirm controls.