

Search for narcotic, psychotropic substances and/or alcohol in keratin matrix (hair, pubic or chest hair)

Gestione Laboratori Scientifici Le Betulle (GLS Le Betulle) guarantees analysis for the detection of narcotic, psychotropic, and/or alcohol substances in keratin matrix by directly collecting and sending the samples for analysis to the CEDAM Centro Diagnostico Ambrosiano laboratory in Bresso, which holds the appropriate regional authorization pursuant to Regional Government Decree 9097/2009.

The GLS Le Betulle laboratory will send the samples for analysis, ensuring they are not tampered with, using the required "chain of custody."

Sample collection is performed by appointment at the Appiano Gentile office, by phone

(Tel. 031 930166) or by email to: : segreteria@laboratoriolebetulle.it

USER INFORMATION

The keratin matrix test, commonly called a "hair test," is a test for clinical or forensic purposes aimed at identifying the use/abuse of narcotic substances, psychotropic drugs, and/or alcohol.

It is a test with forensic and medical significance: it may be requested in forensic settings, in driving fitness assessments by License Boards, and in occupational medicine assessments, especially for certain categories of workers with specific tasks. It may also be requested by the interested party for private use.

The user must arrive at the appointment for the keratin matrix test with clean, dry hair, free of gel, hairspray, oils, or lotions, and without wearing perfume or deodorant.

The user will be identified by a valid identification document; the tax code will not be considered sufficient for identification purposes.

REQUESTED SUBSTANCES

Ethanol (ETG Ethyl Glucuronide) – Opiates (Morphine, Heroin, others) – Cocaine – Methadone –

Amphetamines – Methoxyamphetamines (Ecstasy) – Buprenorphine – Ketamine – THC (Cannabinoids) – Oxycodone – Tramadol – Fentanyl – MDPV –

HAIR SAMPLING

The trained and qualified healthcare professional will remove a lock of hair from the back of the head, as close to the scalp as possible; the amount of hair needed for analysis is a lock the diameter of a pencil.

If the service is prescribed by the Local Medical Boards, the required length is usually at least 3 cm. Some C.M.L. may require different lengths or more portions.

Hair growth generally varies from 0.6 to 1.4 cm/month, and can be influenced by medication use, age, sex, race, and the season. Given the average hair growth rate of approximately 1 cm/month, it

will therefore be possible to determine the time of intake based on the length of hair examined: a 3 cm sample will provide a time window of 2-4 months.

If it is not possible to take a single sample from the back of the head, samples can be taken from other areas of the head if there is obvious hair thinning; the collection can be done by taking smaller strands from different areas of the head.

The hair should not have been dyed, bleached, or permed in the 3 months prior to the exam. Any evidence of cosmetic treatments will be noted on the report.

HAIR COLLECTION FROM OTHER BODY AREAS

Only in cases of excessively short hair, or baldness, can hair from other sources be collected. Chest hair can be used as an alternative to head hair, but it is impossible to accurately estimate the timeframe of consumption.

Pubic hair, which overestimates the concentration of substances, particularly ETG, likely due to urinary contamination, is only appropriate when complete alcohol abstinence is needed: pubic hair, in fact, can test positive even following sporadic alcohol consumption.

Axillary hair should be excluded, as sweating or the use of deodorants can lead to the washout of substances and thus underestimate the data; similarly, beard hair should be excluded because it is subject to potential direct contamination.

Given that the growth rate of unshaven chest and pubic hair is slower than that of head hair, the analysis of these matrices can cover a timeframe of between 9 and 18 months.

Hair sampling must be performed from the corresponding body area (e.g., chest) at multiple locations, so as to obtain an adequate quantity of material comparable to the diameter of a strand of hair.

In this case, there is no minimum and/or maximum length of hair to be sampled; the analysis is performed on the entire length of the sample taken.

POSSIBILITY OF COUNTER-ANALYSIS

The sample must be divisible into two equal portions (A and B): portion A is intended for the requested analysis; portion B will be retained at the CEDAM laboratory for the purposes of a possible verification analysis (counter-analysis).

The interested party has the right to waive portion B, refusing the possibility of contesting the test.

If the tested matrices are found to be positive, the person undergoing the test may request a counter-analysis on the contested sample by contacting the GLS Le Betulle laboratory, which will direct the interested party to the CEDAM laboratory.

The counter-analysis procedures can be performed either at the CEDAM laboratory or at a different laboratory, provided that the indicated facility is on the list of laboratories accredited

by the Lombardy Region for forensic medical tests according to Regional Government Decision 9097/2009.

In the latter case, the interested party submits a specific request to the CEDAM laboratory to send the sample to the counter-analysis laboratory of their choice, at their own expense.

The CEDAM laboratory will transmit, in chain of custody, the sample (aliquot B) to the laboratory of their choice.

The request for analysis of the counter-sample must reach the CEDAM laboratory within 90 days of the report being issued.

The Cedam Italia laboratory will retain the aliquot B for a period of no less than 6 months from collection.

REPORTING TIMES

Reports will be available starting 14 business days (excluding Saturdays) following the blood sample collection.

DELIVERY OF REPORTS

Reports will be delivered only in original paper form to the interested party or their delegate, stamped and initialed by the secretarial staff. They will not be included

in the health record (FSE) or made available online.