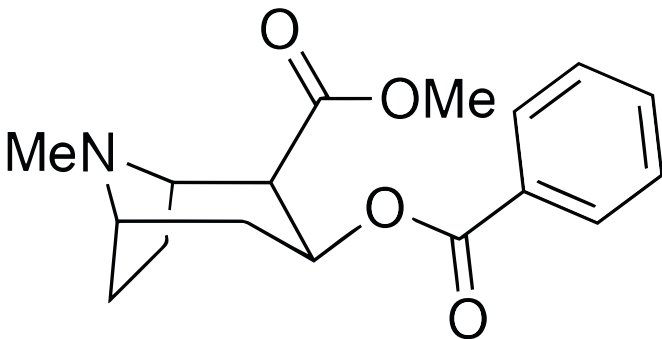


COCAINE

QTest





- INSTRUCTION MANUAL -

FIRST QUANTITATIVE COCAINE TEST KIT FOR IMMEDIATE DETERMINATION OF COCAINE CONCENTRATION IN POWDERED SAMPLES

IMPORTANT INFORMATION - READ THIS FIRST!

- Use this kit at room temperature (if stored in a refrigerator, let it warm up for an hour first).
- Due to transportation, the liquid inside the glass vials tends to stay at the top, near the cap. Therefore, **before starting the test**, it's crucial to take the vials out of the zip-lock bag, and **shake them down** (especially the developer vial with the blue cap) to ensure that all the liquid stuck at the top moves down.
- The vials with biphasic layers (white and black caps) might contain bubbles, and the layers could be mixed. Wait for the two liquid phases in the vials to separate completely. This can take up to 10-15 minutes.
- Perform the test on a flat surface during the daytime (in a well-ventilated area).
- Evaluate the results in good light conditions **immediately** after the color detection (the color can change if you wait too long).
- Use a white A4 sheet of paper as a background when evaluating the color (see section 4 for evaluation details).
- This kit only works with solid or powdery substances. It does not work with liquid samples.
- Each QTest (reagents packed in a zip-lock bag) is intended for single use only.
- Read all instructions at least once before starting the test.

INSTRUCTIONS FOR USE

1. IMPORTANT BACKGROUND INFORMATION

With this rapid test, the present concentration of the active ingredient cocaine in unknown solid and powdery samples can be detected.

Cocaine is derived from the coca plant. Typically, it is extracted using an acid-base process directly at the grow site. Most of the cocaine comes from South America and is then transported to nearly every country. Depending on the length of the supply chain, cocaine can range from almost pure to heavily cut with various substances. A lot of cocaine is at least cut with sugars or starch but could also contain other more concerning adulterants like:

- **Levamisole:** An animal deworming agent that metabolizes into amphetamine in the body, producing effects but being highly toxic to humans.
- **Lidocaine/Procaine:** A local anesthetic often used to mimic a higher cocaine concentration.
- **Phenacetin:** An analgesic and antipyretic used to increase the volume of cocaine, giving the appearance of higher quality, but it is toxic to humans and can cause serious health issues.
- **Caffeine:** A stimulant that is often added to cocaine to enhance its stimulating effects, though it is much less potent.
- **Paracetamol:** A common pain reliever used to bulk up the volume of the drug, diluting its potency.
- **Could be also laced with fentanyl** or other dangerous adulterants, which is a significant risk today.

**Please note that "pink cocaine" (also known as "tucibi" or "tusi") is not an adulterant but rather a separate substance with its own distinct effects. This test is not valid for its quantification.*

Safety Note: We strongly recommend combining our Cocaine-QTest with further tests to analyze for other substances and admixtures. This test is designed to avoid false positives with levamisole, but it may show false positives with lidocaine. So you should use our Cocaine Adulterants Kit as soon as it's available or test with a combination of classical reagents like Scott 2.0, Liebermann, Marquis and Ehrlich. Additional, use our antibody strips, which are designed to detect even very low concentrations of fentanyl.

Follow the QR-Code in section 5 for more information on this.

2. PREPARING FOR THE TEST

Take out all the items from your kit. Together with this instructions you should have:

Per box:

- One pair of protective gloves
- One evaluation color chart with quick reference guide

Per test: single-use application

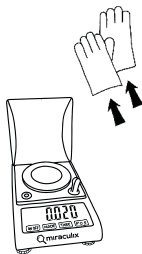
- **Extraction vial:** glass vial with a white cap containing biphasic liquid
- **Developer vial:** a glass vial with a blue cap containing blue liquid
- **Detection vial:** a glass vial with a black cap containing biphasic liquid
- Plastic weighing dish
- Plastic spatula
- Pipet

You will also need a **milligram scale** (make sure that your scales can weigh small quantities safely and follow the QR Code in section 5 for tips for the most accurate weighing result).

3. PERFORMING THE TEST

3.1

Perform the analysis in a **well-ventilated area (CAUTION, the fumes can be flammable/explosive)** and avoid inhaling fumes. First, put on the enclosed nitrile gloves and wear appropriate protective clothing and safety glasses (keep pets, especially cats, away from the testing area). Pulverize your sample finely and mix thoroughly.

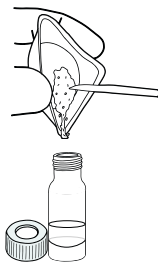


For weighing your sample, use the weighing dish and the spatula. Place the weighing dish on a scale and tare it to zero. Add small amounts of your finely crushed and homogenized sample slowly until you reach a total weight of **20 mg (0.02 g)**. Be precise at this stage, as it will influence the reliability of the concentration result.

Note: Check out our store: We have an affordable, accurate, and calibrated scale available that you can trust. Some scales may have difficulty measuring smaller amounts and work better in higher measurement ranges. In this case, use an additional weight (e.g., a coin) to increase the measurement range. This helps improve the accuracy of the result. Add the weight of the crushed sample to that of the additional weight without using the tara function.

3.2

Open the extraction vial (white cap) and carefully pour the weighted sample into it. Fold the weighing dish diagonally to use it as a funnel. Use your other hand to steady the vial to prevent it from tipping over.



Then, tightly seal the extraction vial (white cap) and **shake it for approximately 60 seconds**, or until all soluble components have dissolved. Place the vial securely on a flat surface and wait for any insoluble components to settle, and the two phases to separate properly. The vial has two layers: cocaine should go into the deeper layer, while the top layer will remove most of the adulterants like levamisole, which increases the accuracy of the concentration result.

A typical cocaine sample should be dissolved completely (the solution could be cloudy)!

3.3



Open the extraction vial (white cap) again and the developer vial (containing blue liquid and cap). Use the pipet **to draw up liquid from the lower of the two layers** (from extraction vial). To do this, press the pipet bulb and hold it firmly. Then, immerse the tip into the center of the lower phase of the liquid and gently release the pipet bulb. It will now fill with liquid. Avoid drawing up any insoluble particles that have settled at the bottom or in the layer between both phases. If you accidentally pipet some of the upper phase, simply return everything to the vial, wait for it to separate again, and then try pipetting it once more. You need half of the pipet full for the next step.

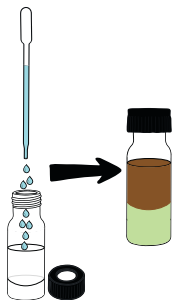
3.4

**6x drops
(100 μ l)**



Return the first two drops from the pipet to the extraction vial. Then, **add six drops (or exactly 100 μ l)** from the pipet into the developer vial (blue cap) containing the blue liquid. Hold the pipet as vertically as possible while dripping. If the liquid in the pipet is insufficient, repeat the process from Step 3.3. You can return any remaining liquid in the pipet to the extraction vial (white cap), which you should seal tightly again afterwards. Close the developer vial (blue cap) correctly and shake it for a bit to ensure that the reagents are well mixed.

3.5



Open the developer vial (blue cap) and detection vial (black cap). Draw up the entire blue liquid from the developer vial and transfer it with the pipet to the detection vial (black cap), which also contains a biphasic liquid. You can do this also in two steps if you struggle to draw up the complete liquid at once. Close both vials with their respective caps. Shake the extraction vial (black cap) several times so that the color can be extracted into the upper phase. The lower phase should be clear with a greenish color. Allow the phases to separate for best results. **The cocaine concentration can be read directly in the upper phase without further incubation.**

Please refer to the information in section 4 to evaluate the result.

4. EVALUATING THE RESULT

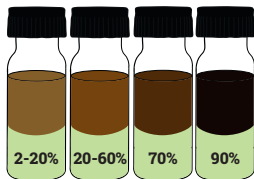
The color change indicating the concentration usually takes **only a few seconds** and remains **stable for about 15 min** at room temperature. Evaluation is performed immediately after adding and mixing the reagents in the detection vial (black cap). Observe the color transition **in the upper phase**.

4.1 READING THE COLOR SCALE

By comparing the intensity or saturation of the liquid in the vial with the enclosed color chart, you can determine the result visually. Good light conditions are essential for optimal evaluation. The best place would be **a bright room without direct sunlight on the vial**. If using artificial light, the influence of different color temperatures may slightly change the hue. You can still perform the evaluation, but consider this (e.g., high blue content in energy saving lamps, green discoloration when using LED light from cell phones, etc).

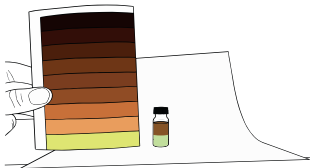
Explanation of upper phases and expected colors:

- **Low Concentration** (2-20%): Light brown
- **Medium Concentration** (20-60%): Darker brown
- **High Concentration** (70% +): Brown-black
- **Very high concentration** (99%): Black with no brown tones detectable



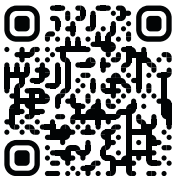
SPECIFIC EVALUATION INSTRUCTIONS

- Use a white A4 sheet of paper as a background.
- Under good light conditions, hold the glass vial next to the color chart about **15 to 20 centimeters** in front of the white sheet of paper and **look through the glass vial head-on**. For best results, your eyes should be pretty close to the vial but no closer than about **15 to 20 centimeters**.
- Now, match the final color of the vial to a color on the color chart scale and read the corresponding amount of your tested sample.
- This concentration applies to your remaining homogenized material.



5. TIPS AND FREQUENTLY ASKED QUESTIONS

For assistance in evaluation, our website provides comparison images that show the colored vials for all concentrations and answer commonly asked questions. Follow the QR code or visit <https://www.miraculix-lab.de/en/faq-cocaine>



You can take a photo of your evaluation similar to ours, and you can digitally analyze the colors using programs like ImageJ. Do you want even more precise and reproducible results without evaluating the color yourself? Then check out our new open-source spectrophotometer, which we provide with laboratory-calibrated reference curves tailored explicitly for our QTests. If you want us to integrate the Cocaine-QTest to the Qtest Photometer please send us feedback for that.

FURTHER INFORMATION:

You can find factual information about individual substances on websites like psychonautwiki.org or erowid.org. These sites provide much information about pharmacology, subjective effects, possible side effects, and other harm reduction measures. If you have any further questions, feel free to reach out to us. We can often direct you to local Safer Nightlife or Harm Reduction projects for counseling and support.

6. LIMITATIONS

- This test is designed to avoid false positives with levamisole, but it may show false positives with lidocaine. Other alkaloids could also produce false positive results, so it is important to combine the quantitative test with other qualitative reagents to verify the presence of cocaine (Scott 2.0 Reagent) and to identify other substances in your sample. Use the Liebermann reagent (where levamisole or lidocaine should show an orange-brown color) or the Marquis reagent. Additionally, use the Ehrlich reagent to check for anesthetics.
- A variety of substances do not show a color reaction with the quantitative detection reagent. If a completely different substance is present, this is indicated by the absence of any color result. However, the presence of a mixture of cocaine with other active substances is problematic.
- Results can be affected by other substances (see point 9, "Disclaimers").
- It is best to evaluate the colors during the day in a bright room, look from the front at the height of the vials, and keep the distance between them and the white background. Individual visual interpretation can lead to users misjudging the concentration, typically just by one color field. Correct usage and using our comparison images significantly reduce these variations among participants. Validations have shown that even inexperienced users, without knowledge of the instruction guidelines, could confidently assess whether it was a weak, medium, or strong concentration.
- Sources of potential inaccuracies in concentration results: Inaccurate weighing result (scale not accurate), residual moisture in the substance sample due to water or solvents, transfer of undissolved solids into the detection reagent, variations in drop size, insufficiently non-representative sample tested (incomplete extraction of the active substance), homogenized quantity too small or insufficiently homogenized, expired/discolored detection reagents.

7. STORAGE AND SHELF LIFE

Store the reagents at room temperature (2 - 20 °C) out of direct sunlight for a shelf life of at least 12 months. If possible: it is best to store the chemical reagents chilled in the refrigerator.

8. WARNINGS

- Pay attention to the warnings on the zip bag. Always keep the ingredients in this bag even after use.
- The test kit must always be kept away from children and animals.
- When using the test kit, suitable gloves, protective clothing, and face/eye protection must be worn.
- If you wear contact lenses, remove them before use.
- All delivered materials and liquids should not be ingested or inhaled.
- The test kit should be used outdoors or in well-ventilated areas.
- The included liquids in the test kit contain various flammable solvents and vapors that can cause skin irritation or severe eye damage/irritation. Skin, eyes, mouth, or clothing contact should be avoided.
- If contact occurs with the above-mentioned areas, remove the relevant clothing immediately. Rinse or flush affected skin areas immediately with plenty of water for several minutes.
- In case of contact with the eyes, rinse them immediately with plenty of water for several minutes.
- Suspected of damaging fertility, may cause damage to organs (nervous system) through prolonged or repeated exposure (if inhaled).
- Vapors may cause drowsiness and dizziness.

9. DISCLAIMERS

- Miraculix QTests are to be used for research purposes and quantification of unknown substances only.
- Your sample may be contaminated with one or more unknown substances that cross-react with the reagents and affect the quantitative result.
- The result does not mean your sample is safe to consume. It could still contain unwanted substances and impurities that can be harmful or even deadly.
- The result of a tested sample should not be considered definitive. Many factors, including mixtures of multiple substances, cross-reactions, and/or lighting conditions play a role in chemical reactions.
- Miraculix assumes no responsibility for using or misusing the test kit or the results.
- Samples processed with the test kit are not to be consumed.
- Patent pending technology.

10. DISPOSAL OF MATERIALS

Check your local regulations for proper disposal. This kit contains hazard solvents that are toxic to aquatic life with long lasting effects.

MIRACULIX COMMUNITY RESEARCH

We started our first open source community research on psychedelic substances. Together with the Charité - Universitätsmedizin Berlin, we are collecting data from the QTests results together with the subjective experiences of the community to research on the entourage/ensemble effects of magic mushrooms.

If you want to learn more: Check our website and join our community!



For more information, visit:



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<https://miraculix-lab.com>