

THE PATH OF THE RUMA® -MARKER

The Ruma marker serves as a 'finger print' in the urine sample itself. The individual markers - PEGs of different chain lengths - are not processed by the body. That means they are completely excreted just the way they were when they entered the body.

As substances entirely free of effect they are neither medicine nor medical device and, actually, they wouldn't even have to be listed as an ingredient. That has been confirmed by multiple international bodies such as EMA or FDA.

The different chain lengths of our markers serve as coding. Furthermore, the structure of the markers is not altered by the addition or ingestion of other substances. Several clinical trials were able to prove beyond doubt that neither foods or beverages of all kinds nor the addition of chemicals such as oxidants, acids, lyes, etc. compromises detection and identification of the individual markers. On the contrary. Manipulation attempts using chemicals are reliably detected by the patented Ruma Marker-System and are communicated accordingly.



Supervised handover of the individualized Ruma® marker capsule to the patient



They take in the Ruma® marker under supervision (or using the recording feature of the Ruma Digital-System).



After the waiting period: Collection of the urine sample **without supervision**.



The marker is in the urine sample



The lab tests for the marker assigned by the physician, for manipulations and - when using the capsule - additionally for an analytical spectrum of up to 100 different substances.

RUMA®
Marker-System

RUMA DIGITAL-SYSTEM

Version 10 | 2026

Instructions for the application of the Ruma®Digital-System

Manipulation-proof
urine analysis
in addiction therapy

The alternative to direct
observation during urine
sample collection



For Android
Smartphones

Install the
patient app
now

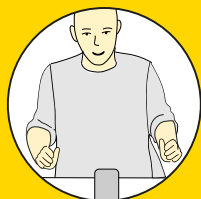
For Apple
Smartphones



T +49 211 / 3990 11 0
F +49 211 / 3990 11 20
E info@ruma-digital-system.com
W ruma-digital-system.com

Ruma GmbH
Wilhelm-Schlombs-Allee 1
50858 Cologne
Germany

Instructions for sample donors



Preparation

- > Free table
- > Sufficient light
- > Rolled up sleeves if necessary
- > Handy hochkant in Ständer gestellt



- > Ein durchsichtiges Glas mit ca. 100/200 ml Wasser
- > Ausgepackte Marker-Dose
- > Leere Marker-Box
- > Unwrapped fizzy candies



Application

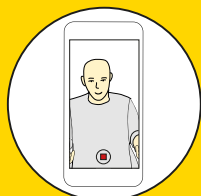
- > Start the app



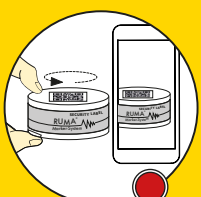
- > First step: scan QR code on the empty outer box



- > Second step: scan QR code on the marker dish



- > The video recording starts. **You now have 150 seconds!**

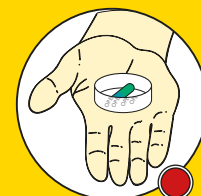


Start recording

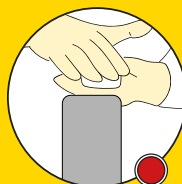
- > Please show all sides of the unopened dish to the camera



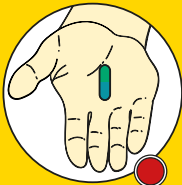
- > Remove the narrow security strip from the lid
- > Remove the security sticker from the side of the dish



- > Open the dish



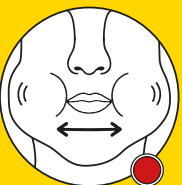
- > Place palm of your hand on open dish



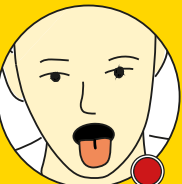
- > Turn hand and dish so that the capsule drops on your open hand



- > Place the capsule on your outstretched tongue so that it is clearly visible
- > Swallow the capsule with a sip of water



- > Take a second sip of water and vigorously swish it around your entire mouth for at least 15 seconds.



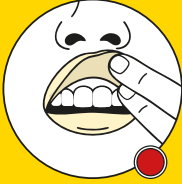
- > Show your empty extended tongue



- > Lift the upper lip, then pull down the lower lip. In both cases, make sure the gums are clearly visible



- > Chew and swallow the fizzy candies one after the other, chewing each one for 25 seconds.



- > Stick out your tongue, showing it is empty.
- > Lift the upper lip, then pull down the lower lip. In both cases, make sure the gums are clearly visible.



The recording will automatically end after 150 seconds, then be encrypted and transmitted.

INSTRUCTION FOR URINE COLLECTION



- > After waiting the minimum requirement of 60 minutes, the participant can collect the urine sample independently.



- > Important: The **first urine after marker ingestion** is required.



- > Attention: **Do not drink anything during the waiting period.**

- > No supervision required when providing the urine sample.

- > Pack the urine tube into the enclosed protective sleeve. Please use only the provided shipping envelopes for mailing.