

Your **Power** for Health



greiner bio-one



**SCS** Saliva Collection System

## Saliva Collection System

in saliva veritas

## GBO Saliva Collection System - SCS in saliva veritas



Greiner Bio-One has revolutionised saliva analytics with the new, unique collection and quantification system. This is the first system in the world on a liquid collection basis, and can ensure a representative collection from the entire oral cavity. The collected saliva sample is suitable for a broad range of applications. The system fulfils the requirements of the in vitro diagnostics and medical device guidelines and provides application opportunities for developing new saliva diagnostics.



Permanent availability as well as simple, stress-free collection make saliva an interesting material for sampling. As an ultrafiltrate of blood, saliva is of scientific relevance and has become increasingly established in diagnostics over the years. Saliva is a useful alternative to blood or urine. Furthermore the infection risk for medical staff is significantly reduced due to the non-invasive collection technique.

With this unique product, the photometric determination of the saliva quantity allows for the definite determination of the analytes in the initial volume. The main advantage of the system is the basis for reproducible saliva analytics.

## in saliva veritas - Areas of Application

### Drug detection

The detection of narcotics, e.g. cocaine, amphetamines, cannabis etc., and psychotropic substances is becoming increasingly important for various reasons. The window of detection for narcotics and psychotropic substances in saliva is comparable with blood and conclusions can be drawn on current drug consumption. Standard enzyme immunoassays as well as instrumental analysis methods can be used.

### Tumour diagnostics

Today's molecular biological techniques allow for the detection of nucleic acids from various examination materials. DNA and RNA have proven to be highly stable in the saliva collected and preserved with the system. This enables early detection of oral cancer, for example.

### Infectious disease diagnostics

The direct detection of viral or bacterial pathogens - e.g. Herpes simplex or the Varicella zoster viruses - using molecular biological detection methods as well as the possibility of antibody detection in saliva for pathogens opens up new, straightforward screening opportunities with regards to viral or bacterial infectious diseases.

### Hormone analytics

The determination of steroid hormones, e.g. cortisol, progesterone, or testosterone as well as biogenic amines such as melatonin from saliva can give information on a person's current hormone status. The easy, stress-free sample collection as well as the fact that saliva only reproduces the free (biologically active) hormone concentration, is a particular advantage.

### Clinical chemistry parameters

The determination of saliva electrolytes, saliva enzymes such as  $\alpha$ -Amylase, saliva proteins and saliva protein metabolites such as total protein and creatinin are just a few examples for application in clinical chemistry. They can be used as markers for an indication of a person's state of health.

## Advantages of the System During Collection

The simplicity of the system means that the collection can be carried out by both patient and medical staff.

### Advantages for the patient

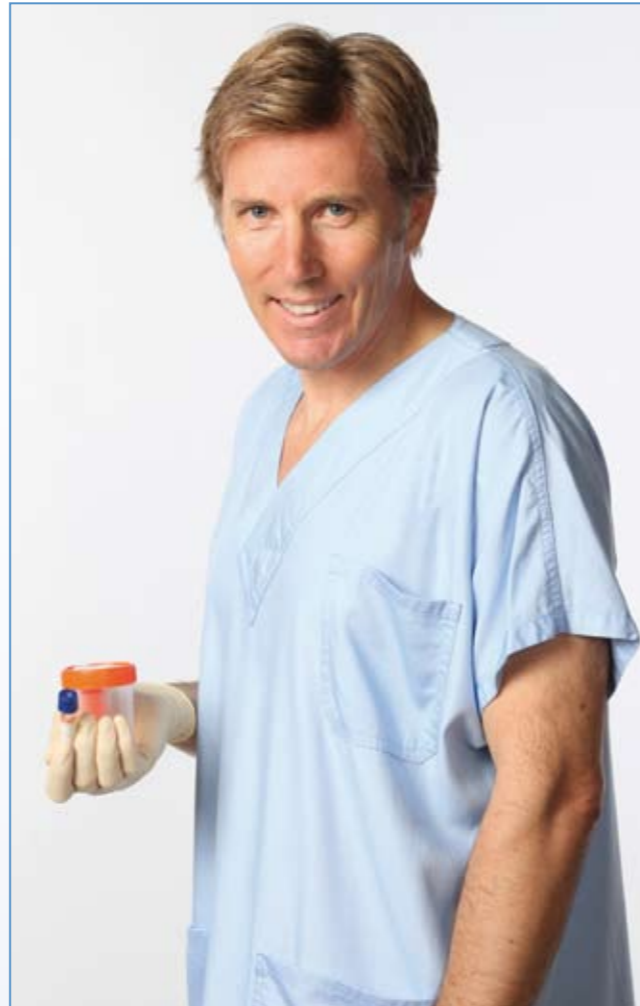
- Non-invasive
- Free of pain and stress
- Can be used any time, day or night
- No waiting time
- Collection can be carried out anywhere
- No invasion of privacy
- Dry mouth or viscosity not a hindrance
- Very low risk of infection

### Advantages for the personnel

- Quality assurance and constant chain of continuity (primarily in forensics) are the standard of the future.

### Advantages for ensuring the chain of continuity

- Protective film clearly indicates if there has been unauthorised intervention
- Sample tampering is prevented
- Sample swapping is impossible
- Two tubes for sample splitting
- Labels for immediate sample identification
- Safe sample transport



For the first time, standardisation of saliva preanalytics is ensured.



### Advantages for analysis

- Easy sample preparation
- Closed system for hygiene
- Application of various photometers for quantification
- Simple one-step processing
- Uncomplicated process integration
- Standardised tubes for analysis
- No loss of sample volume (as with collection pads)
- Authenticity can be determined with control
- Fill volume is readable

## Greiner Bio-One Saliva Collection System

The Greiner Bio-One Saliva Collection System makes preanalytics even simpler. By rinsing with the saliva collection solution, saliva is collected easily and without stress. Sample collection with the collection beaker is then a comfortable procedure. The hygienic sample transfer is ensured due to the vacuum in the saliva transfer tube. The dye contained serves as internal standard and ensures reproducible saliva analysis.

### The Components:



**0** Mouth rinsing solution, tube 0



**1** Saliva extraction solution, tube 1



**2** Saliva collection beaker 2



**3** 2x saliva transfer tubes 3



**0** Optional to cleanse oral cavity; then spit out rinsing solution.



**1** Simple saliva collection by thoroughly rinsing out the oral cavity (2 min.); contains yellow internal standard for determination of the saliva quantity.



**2** For collection of saliva after rinsing.



**3** Due to the vacuum in the tube, transfer is quick and hygienic. The saliva is furthermore stabilised and preserved.

## Saliva Quantification Kit

The food colouring tartrazin (internal standard) is the basis that is **photometrically** determined (450 – 520nm) in the calibrators, controls and collected saliva samples. The calibrators guarantee the quantitative and donor specific determination of the saliva quantity in the sample. Finally, the saliva quantity in the sample is calculated. This core principle of the unique saliva collection system is an important prerequisite for correct quantity determination of analytes.



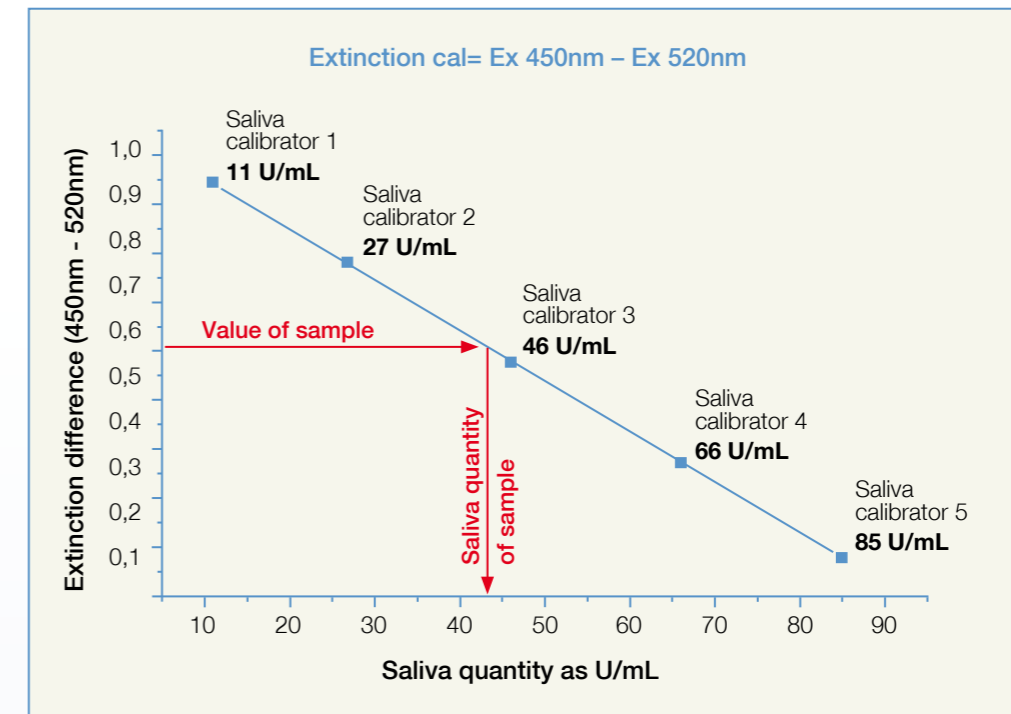
### 2 Controls

- 1 30 U/mL
- 2 70 U/mL

### 5 Calibrators

- 3 Calibrator 1: 11 U/mL
  - 4 Calibrator 2: 27 U/mL
  - 5 Calibrator 3: 46 U/mL
  - 6 Calibrator 4: 66 U/mL
  - 7 Calibrator 5: 85 U/mL
- means a saliva quantity of 11 – 85% by volume

## Calibration and Saliva Quantity Determination



## Article Overview

Item n°.	Description	Pcs./carton
<b>GBO Saliva Collection System - for Self Testing*</b>		
881011	GBO Saliva Collection System, single-pack	1 pc.
881012	GBO Saliva Collection System, 50 pcs. bulk Bulk-packed in a carton. All components are packed in one carton, sufficient for 50 applications.	50 pcs.
<b>GBO Saliva Collection System - for Professionals*</b>		
881111	(0) GBO Rinsing Solution 4ml	1200 pcs.
881112	(1) GBO Saliva Extraction Solution 4ml	1200 pcs.
881210	(2) GBO Saliva Collection Beaker, with integrated transfer unit	200 pcs.
881113	(3) GBO Saliva Transfer Tube 3.5ml	1200 pcs.
<b>GBO Saliva Quantification Kit</b>		
881010	GBO Saliva Quantification Kit (for 40 tests)	1 pc.

#### \* Self-Testing

Self-testing means that the test person can do the saliva collection his/herself without the assistance of any medical personnel. The system as well as the corresponding instructions for use is tested and certified for self-testing.

#### \* Professionals

Doctors or medical personnel additionally have the possibility to purchase the above listed single products to create their own setting for saliva collection.



For further information, please visit our website [www.gbo.com/preanalytics](http://www.gbo.com/preanalytics) or contact us:

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