

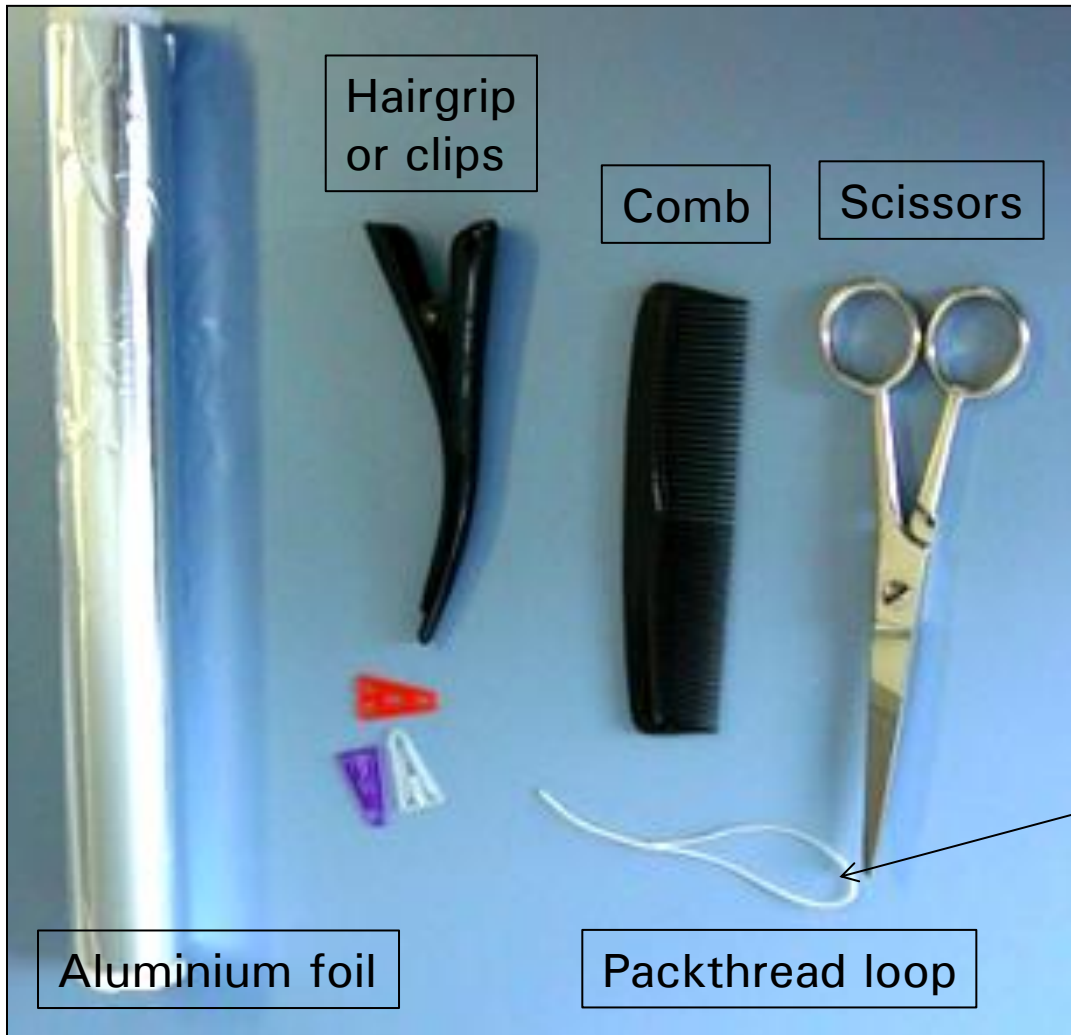
# Preanalytics and shipping of hair samples for steroid analysis

How to help the lab to get you your results most quickly & accurately



# Instructions for hair sampling

## Step 1: Preparation



Please note:  
For Packthread loop  
see PDF „How to make  
the packthread loop“

# Instructions for hair sampling

## Step 2: Hair division



1. Divide the hair at the back of the head using the hairgrip
2. Separate 2-3 hair strands (approx. 2 cm below the cranial bone)

**Please note:**

Overall diameter = half of a pencil = at least 3 mm or  $\frac{1}{8}$  inch

3. Comb the strands

## Instructions for hair sampling

### Step 3: Packthread loop



Thread the combed strands through the loop and **tighten** the loop

## Instructions for hair sampling

### Step 4: Cutting the strand



Cut the hair **as close**  
**as possible** to the scalp

## Instructions for hair sampling

### Step 5: Mark scalp-near end on aluminium foil



1. Place the strands on the **aluminium foil**
2. **Mark the scalp-near end** of the hair strand by drawing a line on the aluminium foil using a permanent marker

# Instructions for hair sampling

## Step 6: Folding aluminium foil

1



2



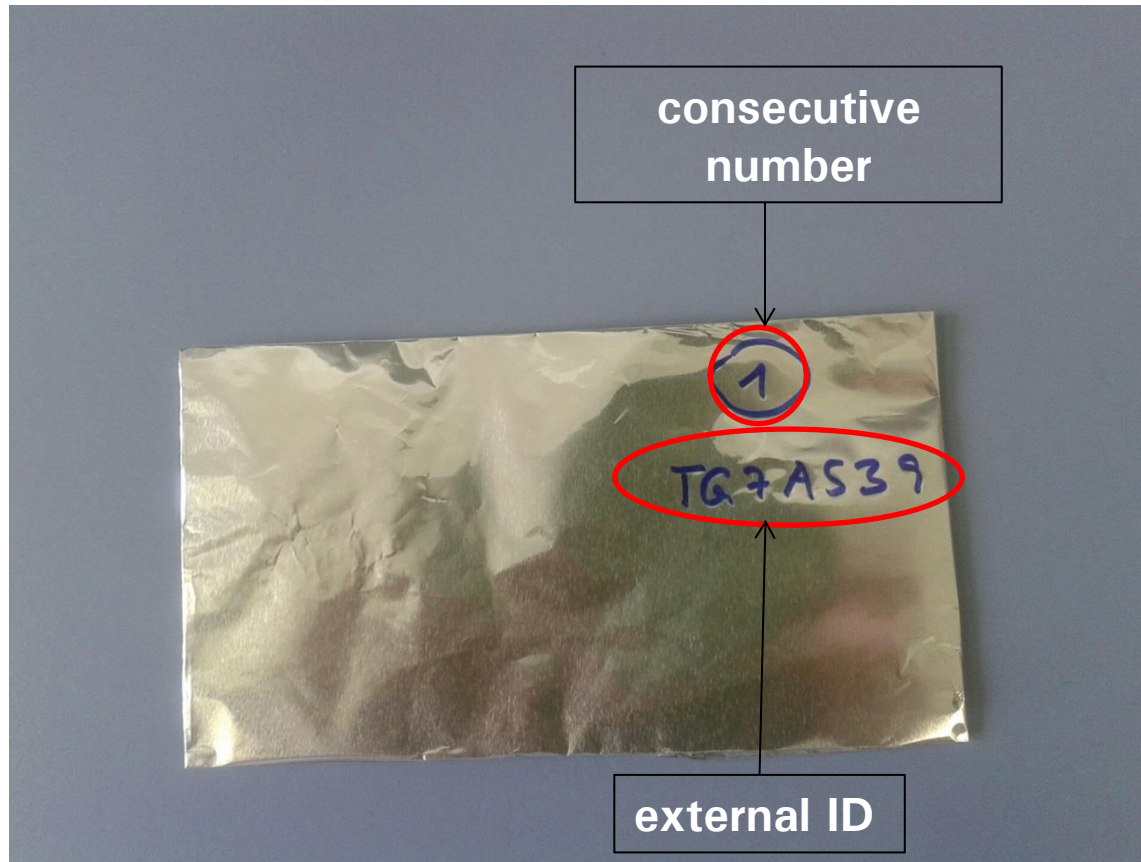
3



1. **Fold** the aluminium foil
2. Make sure **both ends are sealed**, so that hair cannot fall out
3. Also make sure that the aluminium foil is large enough to fully cover the hair strands

# Instructions for hair sampling

## Step 7: Write consecutive numbers



1. Please write consecutive numbers on your samples
2. Please do not use letters together with the consecutive numbers as the lab operates only with numbers!!
3. If you wish you can also add your own study ID written below the consecutive number (see picture)
4. Please send us an **Excel-File** with all hair samples and corresponding code via E-Mail

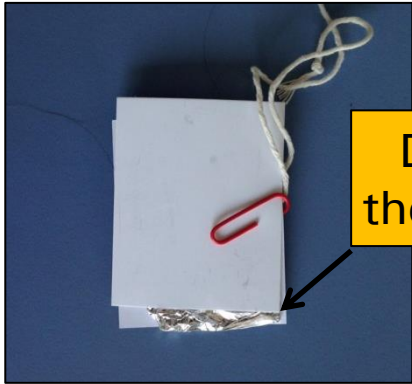
Ina.Kaden@tu-dresden.de



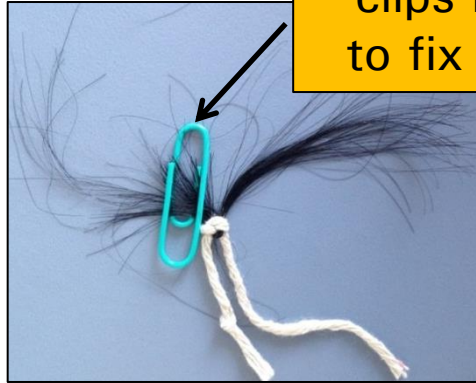
# Instructions for hair sampling

## NO-GOs

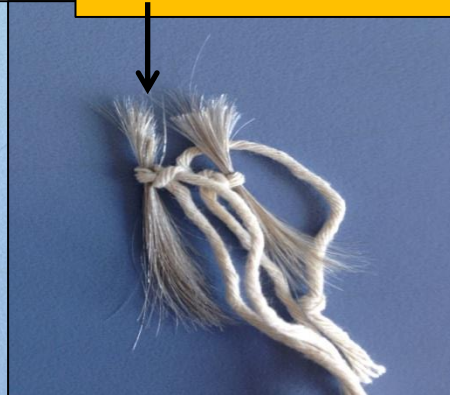
Do not fold the hair strand!



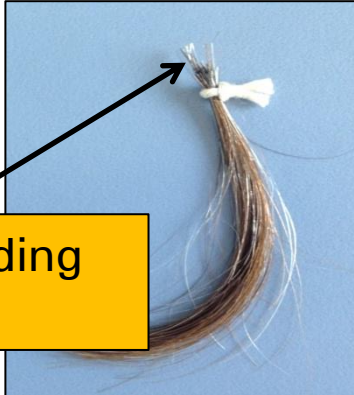
Do not use paper clips nor tape to fix the hair!



Cut-off strand shifted

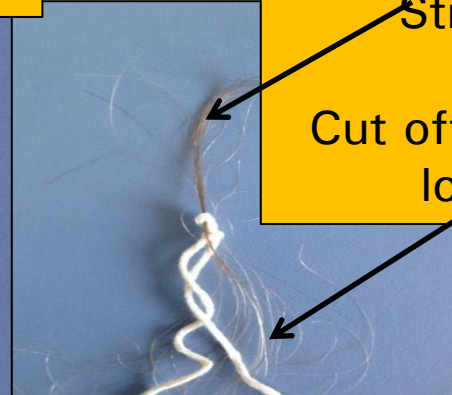


Protruding hair



Strand too thin

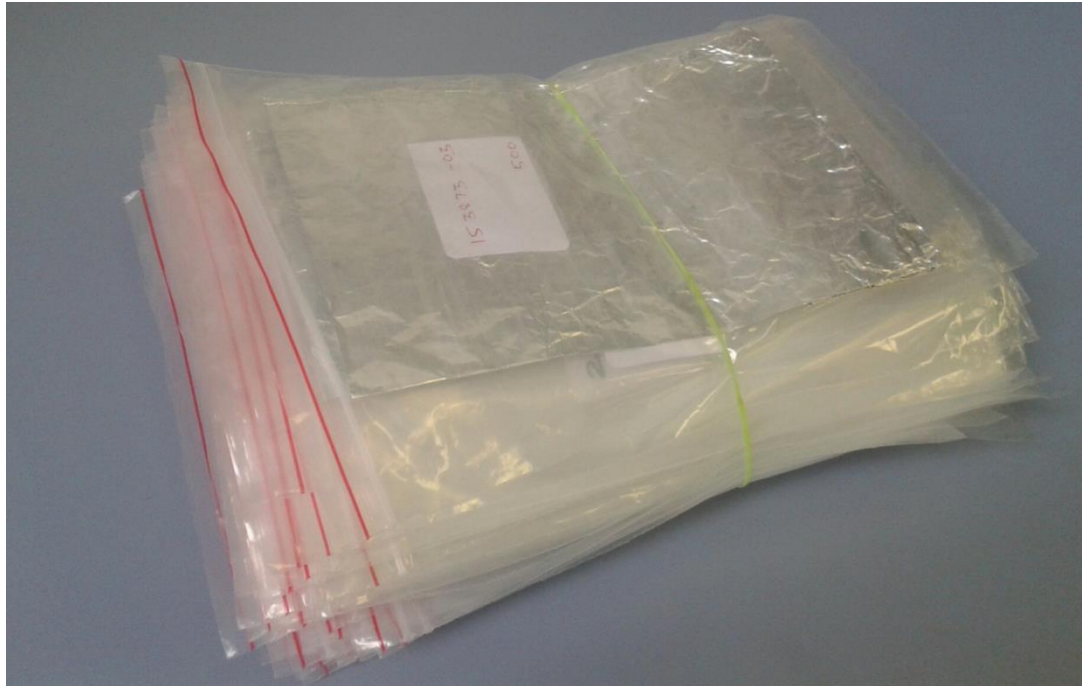
Cut off the end of very long strands!



The higher the quality of your delivered hair samples, the higher the quality of the results that we can provide for you!

# Instructions for hair sampling

## Step 8: Packaging



**For larger number of samples: Please arrange samples in a clear order, e.g. store every 50 hair samples in separate packages (picture only exemplarily)**

# Instructions for hair sampling

## Order form – please fill out completely!

Order Form Hair.pdi - Adobe Acrobat Pro

Datei Bearbeiten Anzeige Fenster Hilfe

Erstellen | [Icons] | Anpassen

1 / 2 | 130% | Werkzeuge Signieren Kommentar

Füllen Sie bitte das folgende Formular aus. Vorhandene Felder

### Order Form – Analysis of Hair Samples

<b>Contact Details</b>	
Institute/ Department:	
Contact Person:	
Email:	
Telephone:	
Reference / Project No.:	
<b>Shipment of Samples</b>	For smooth shipment and rapid analysis of your samples: - Write consecutive numbers on the aluminium foils of your samples - Do not state any commercial value on the shipment documents (state \$1 commercial value). Important: Provide the following customs tariff number: 3001 2040 - Please notify ina.kaden@tu-dresden.de prior to shipping. THANK YOU !!
<input type="radio"/> Complete shipment	Shipment date: [ ]
<input type="radio"/> Partial shipment	Expected date of next shipment: [ ]
Number of samples: [ ]	
<b>Performance of Hair Analysis</b>	
<input type="radio"/> Immunoassay	<input type="radio"/> LC-MS/MS (full steroid panel, please specify your request below)
Number of Segments: <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	

Please send us the filled out form both via email and place a copy in the package when sending the samples

Please find advantages/disadvantages of both methods on next slide

# Instructions for hair sampling

## methods for steroid analysis

### Immunoassay:

- Standard assessment method for the detection of cortisol only
- Use for other steroid hormones in hair is not recommended
- Issues of cross-reactivity may affect results to some extent



### LC-MS/MS:

- Gold-standard method with highest sensitivity and specificity
- Simultaneous identification and quantitation of a steroid hormone panel in hair (cortisol, cortisone, corticosterone, DHEA, testosterone, progesterone)



## **Shipping**

### **Shipping address**

**Prof. Dr. C. Kirschbaum**  
**Biopsychologie – TU Dresden**  
**Zellescher Weg 19, Raum 212**  
**D – 01062 Dresden, GERMANY**  
phone: +49-1525-3724735  
(Prof. Dr. Clemens Kirschbaum)

# Shipping

## Further notes

1. Use a **courier service** that will deliver the samples within 3-4 working days (TNT, FedEx, UPS etc.)
2. When doing the paperwork, **DO NOT STATE ANY COMMERCIAL VALUE** (write 0.1\$ in the form; otherwise we will have to pay taxes), **Name the following customs tariff number: 3001 20100**
3. **Print out the next page and attach it on top of your shipping box** so that it is clearly visible for customs. This usually avoids unnecessary hold-up of your shipment.

# Zollerklärung

Diese Sendung enthält menschliche Haarproben. Die Proben stammen aus einer staatlich unterstützten wissenschaftlichen Studie und sollen von dem Empfänger auf Hormone untersucht werden. Sie sind nicht infektiös und dienen ausschließlich wissenschaftlichen Zwecken.

Kein kommerzieller Wert.

Wert nur für Zollzwecke: 0,1 Euro.

**Warentarif-Nummer: 3001 2010**

Bitte kontaktieren Sie bei Fragen

Clemens Kirschbaum unter +49-1525-3724735.