1. Take an assembled TSU (needle + connection piece + collection tube)

2. Squeeze the two spring loaded retainer clips together

2a. And insert the TSU as shown in the picture

2b. After insertion of the TSU release the spring loaded clips to lock in the tube

2c. Carefully squeeze the plier handles until the large piston comes to a stop against the red connection piece

3. You have now completely grabbed the needle. After the needle is inserted into the piston you can release the handles

4. You can now easily remove the red connection piece while holding the two red tabs and pushing sideways

5. The pliers are now charged and ready for use. At first this charging action seems long but with experience this should only take a couple of seconds

TSU’s should be stored at room temperature prior to use (for a maximum period of 12 months). Care should be taken not to expose the unused product to extremes of heat or cold prior to sampling.

Take care not to cut fingers on the metal needle. It is very sharp!
Taking an ear notch sample

1a. Slide the charged pliers over the ear and position the cutter about 1cm to 2cm from the edge of the ear.

1b. Try to avoid large veins and ridges. The sample should be taken in a very swift, fluid motion.

2a. Remove the TSU tube from the pliers by squeezing the two spring loaded clips together, then slide out the tube.

2b. A tissue sample should be clearly visible inside the tube.

3. Remove the used needle from the pliers by pushing the handles apart. This will loosen the needle and make it easy to remove. You cannot reuse the needle as it has no red plunger.

The TSU is for SINGLE USE only, both the tubes and the needles can’t be re-used! See the difference between an unused and a used TSU.

In the used TSU a clear RED plunger will be visible indicating the tube already contains a sample and can’t be used again.

Extract sample from this area. (3cm from head, 6cm from edge of ear)

We recommend samples be taken from the back of the ear rather than the front to minimise the amount of hair which can prevent the TSU from sealing correctly.

Sample can be taken from anywhere in the highlighted area, try to find a spot as free from hair as possible and not near a vein.

Be sure to check the TSU after sampling to ensure the cap has sealed properly to avoid buffer leaking.

Once the tissue sample has been extracted, care should be taken to store the product at room temperature or in a refrigerator, but NOT to be frozen. The best results are obtained when the samples are analysed within one year after the sample collection.