

## **ENDOCRINOLOGY SAMPLING PROTOCOLS**

### **Blood sampling**

Analyses can be performed on both serum and plasma for all hormones but ACTH, which requires EDTA plasma only.

Haemolytic, icteric or lipemic samples should be avoided. In case only these samples are available, care should be taken in interpreting results.

### Serum collection

Tubes with no additive should be used.

Allow blood to clot at room temperature for 30 minutes if centrifugation will be performed within 2 hours after bleeding. If longer time is previewed, store the samples in the refrigerator until centrifugation.

Centrifuge samples for 10 minutes.

Transfer serum to a labeled tube and store properly (refer to sample conservation table for storing condition).

### Plasma collection

Tubes with appropriate anticoagulant should be used. Remember that:

1. For ACTH EDTA tubes should be used.
2. For sampling from reptiles **EDTA TUBES SHOULD BE AVOIDED** to prevent total hemolysis of the sample. Any other anticoagulant can be use for reptiles, but we suggest to contact us before sampling in order to have information on the best anticoagulant to use, depending on the test you are interested in.

Never leave samples in serum separator tubes, as additives can interfere with analyses and the gel barrier can dislodge during transit, altering the samples.

### **Urine, faecal and other biological fluids sampling**

Measurements in urine or other biological fluids requires 1-5 ml of sample (depending on the number of tests to be performed).

Faecal analyses require 0.5-1 g sample (depending on the number of tests to be performed).

All samples should be kept frozen (-20°C) immediately after collection.

### **Saliva sampling**

For saliva collection animals should be starved for at least 5 hours before sampling, to prevent contamination of sample by food.

We suggest to carefully wash (two/three times) the mouth before sampling. Washing (at least for 5 consecutive minutes) is mandatory if animals have been fed before sampling.

Use SALI-TUBES or SALIVETTE for sampling and store samples at -20°C.

### **Skin and mucus sampling**

Skin and mucus samples can be collected by gently scratching the back of aquatic animals (i.e. fish, rays, cetaceans) or by punching skin as for DNA analyses.

Minimum amount of sample is 50 mg (lower amount will over-estimate hormone concentrations).

All samples should be immediately stored at -20°C.

### **Tissues sampling**

For hormonal analyses a total amount of 1-2 g/tissue should be collected, placed in plastic bags and clearly labeled.

Samples should be stored at -20°C.