SAMPLING PROTOCOLS

Depending on the analysis requested, different sampling and conservation protocols are required.

TRACE ELEMENTS

Analyses are performed with an ICP-OES system.

Blood

Analyses are performed on whole blood, which can be collected with heparinized, EDTA, citrate tubes.

NEVER LEAVE SAMPLES IN COLLECTION TUBES. Transfer blood to clean tubes and store.

Minimum amount of samples for analyses is 1 ml whole blood. After collection, samples should be stored at -20°C until shipping.

Urine, faecal and other biological fluids sampling

Measurements in urine or other biological fluids requires 1 ml of sample. Faecal analyses require 0.5-1 g sample. All samples should be kept frozen (-20°C) in plastic tubes or vials.

Skin and tissues sampling

Analysis of skin and tissues samples requires a total amount of at least 0.1 g/tissue, which should be collected at necropsy (for tissues) or by gently scratching the back of aquatic animals (i.e. fish, rays, cetaceans) or by punching skin as for DNA analyses.

All samples should be immediately stored **individually** at -20°C in plastic bags.

ORGANIC COMPOUNDS

Analyses are performed with an GC-MS system.

Blood

Analyses are performed on whole blood (5 ml) or plasma (2 ml), which should be collected with heparinized tubes.

Plasma collection

Tubes with appropriate anticoagulant should be used. Remember that:

1. 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.

After collection, samples should be stored at -20°C until shipping.

Skin and tissues sampling

Analysis of tissues samples requires a total amount of at least 5 g/tissue, which should be collected at necropsy and immediately stored **individually** at -20°C in aluminum foils.

BIOTOXINS

Analyses are performed with ELISA systems.

Blood

Analyses are performed on serum or plasma, which should be collected with heparinized tubes.

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 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.

After collection, samples should be stored at -20°C until shipping.

Total amount of sample required is 0.5 ml.

If only very small amount of sample can be collected, grade-903 filter paper blood collection card has to be used. In this case, $100 \ \mu l$ of whole blood are sufficient. Please, contact us for further information if you need to use filter paper collection cards.

Feces, urine and gastric content sampling

Analysis of fees, urine and gastric content samples requires a total amount of at least 10 ml liquid or 1g feces, which should be collected and immediately stored **individually** at -20°C in tubes.

Tissues sampling

Analysis of tissues samples requires a total amount of at least 5 g/tissue, which should be collected at necropsy and immediately stored **individually** at -20°C in aluminum foils.