

**The Education, Scholarships, Apprenticeships and Youth Entrepreneurship
Programme – EEA Grants 2014-2021**

#1 COLLECTION OF BIOLOGICAL SAMPLES

Research Center for Advanced Medicine – Medfuture (UMFIH) can receive and process various biological samples, including liquid biopsies like blood, cerebrospinal fluid (CSF) and saliva samples, but also solid biopsies meaning mainly tissue samples. All samples need to be collected in sterile containers, if not indicated otherwise.



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1.1. Collection of blood samples

For ongoing studies, the following volumes of blood will be collected:

- a. For collection of blood on anticoagulant use special sterile tubes, lined with anticoagulant: Sodium citrate, EDTA or Heparin. The minimum volume of blood on anticoagulant is 3.5 mL.
- b. For collection of blood on coagulation activator use special sterile tubes lined with coagulation activator. The minimum volume of blood on coagulation activator is 3.5 mL.

IMPORTANT!!!

- **Check the inscription on the label** of the tube in which the biological sample is collected, the color code of the cap is not universal.
- When collecting, **homogenize the blood tube very well and keep it upright** so that the blood does not touch the rubber cap. If it touches the lid, it will coagulate, even if it is collected on anticoagulant.
- The biological sample is sent for the separation of the blood components, **within maximum 4 hours after the collection!!!**
- **For each study, all samples will be collected using the same type of tube/anticoagulant.**

1.2. Collection of cerebrospinal fluid (CSF) samples

- a. For collection of CSF sample use sterile plastic containers, without a lining with anticoagulant or coagulation activator lining, preferably in containers for urine samples for culture or coproculture. The minimum volume of CSF is 1 mL.

IMPORTANT!!!

- **CSF is stored at 2-8°C and sent for processing to the laboratory within maximum 4 hours after collection.**

1.3. Collection of saliva samples

- a. For collection of saliva samples use sterile containers for urine storage that is further used for urine culture. The minimum volume of saliva is 2 mL.





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IMPORTANT!!!

- Saliva is stored at 2-8°C and sent for processing to the laboratory within maximum 4 hours after collection.

1.4. Collection of tissue samples for DNA/RNA/protein extraction

- a. For collection of tissue samples further used for DNA, RNA or protein extraction use sterile cryotubes of 1.8-2 ml. The tube is immersed in liquid nitrogen immediately after collection and further sent out to the laboratory for processing.

IMPORTANT!!!

- The tissue sample **MUST NOT be thawed**, freeze/thaw steps affect sample quality, and improper transport carries risks of obtaining erroneous results.

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