
SOMAscan™ Assay
Recommended Sample Handling and Processing

SomaLogic

Blood, Plasma, and Serum

Recommended blood sample collection protocol

Serum, EDTA, and Citrate plasma are accepted.

- Check the expiration date on all of the draw tubes. If expired, replace with new ones.
- Perform the venipuncture per institutional guidelines.
- If more than one sample type is collected, follow the collection order according to tube manufacturer's guidelines.

General blood sample processing requirements

Proper processing of the collected samples is critical. Many tubes have a minimum and maximum fill line, and these requirements should be followed. It is particularly important that time constraints are observed and that samples are not left at room temperature longer than necessary. **Samples should be processed and frozen at -80°C within 2 hours of collection.**

Note: Hemolyzed samples (pink to red in color) can confound true biomarker discovery. If available, send non-hemolyzed samples for your SOMAscan study.

Plasma processing

- Centrifuge plasma tubes (Citrate, EDTA tubes) at room temperature. If within tube manufacture's specifications, spin at 2200 x g (**not** RPM) for 15 minutes (this speed has been chosen to attempt to obtain cellular content and platelet free samples. Observe separation of blood cells and plasma, with plasma layer on top.
- Draw off only the plasma layer (leave some plasma behind in order not to disturb the cell layer) and aliquot into appropriately labeled tubes.
- Aliquot samples immediately and then place aliquoted samples in a -80°C freezer.

Note: Plasma samples do not need to clot, and should be centrifuged immediately after collection.

Serum processing

- Allow serum to clot for 60 minutes at room temperature prior to centrifugation.
- Centrifuge serum tubes. If within tube manufacture's specifications, spin at 2200 x g (**not RPM**) for 15 minutes (this speed has been chosen to attempt to obtain cellular content free samples. Observe separation of blood cells and serum, with serum layer on top.
- Draw off only the serum and aliquot into appropriately labeled tubes.
- Aliquot samples immediately and then place aliquoted samples in a -80°C freezer.

Sample Volume Requirements

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Table 1. Matrices and Sample Size Requirements

| Species | Sample Type | µL Sample Requested |
|----------------|-------------------------|----------------------------|
| Human | EDTA Plasma | 150 |
| | Serum | 150 |
| | Citrate Plasma (liquid) | 150 |

When handling human tissue samples, it is important to follow all institutional guidelines. Please check with your institution's Environmental Health and Resource department for blood borne pathogen training and additional resources.