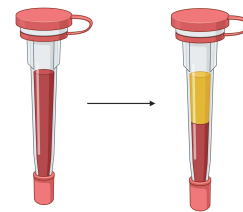


Mar 27, 2025

Processing Blood Intended for Olink Assay

DOI

<https://dx.doi.org/10.17504/protocols.io.261ger81jl47/v1>



Adrien Stanley¹

¹Allen Institute for Neural Dynamics

Allen Institute for Neural...



Avery Weaver

Allen Institute for Neural Dynamics

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN  ACCESS



DOI: <https://dx.doi.org/10.17504/protocols.io.261ger81jl47/v1>

Protocol Citation: Adrien Stanley 2025. Processing Blood Intended for Olink Assay. **protocols.io**
<https://dx.doi.org/10.17504/protocols.io.261ger81jl47/v1>



License: This is an open access protocol distributed under the terms of the **[Creative Commons Attribution License](#)**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

We use this protocol and it's working

Created: January 27, 2025

Last Modified: March 27, 2025

Protocol Integer ID: 119654

Keywords: Olink assay, Blood preparation, Plasma, olink assay this protocol, blood preparation step, olink assay, processing blood, analysis of cytokine, temporal assessment of immune response, cytokine, assay, immune response, protocol, blood

Abstract

This protocol describes blood preparation steps required for analysis of cytokines using an Olink assay. This protocol is applied to samples collected during the protocol 'Temporal Assessment of Immune Response.'

Materials

	Material	Manufacturer/Supplier	Catalog Number
	Blood collected for analysis, on ice.		
	Ice & Ice bucket	VWR	76302-992
	Centrifuge	Eppendorf	Model# 5424 R
	Low protein binding tubes	Fisher Scientific	23-045-258
	Caps for low protein binding tubes	Fisher Scientific	22-038-265
	Skirted 96 well plate	Fisher Scientific	AB-0800
	20-200ul Pipette	Rainin	17014391
	20ul Pipette tips	Mettler-Toledo	17014960

Equipment

Centrifuge

NAME

Eppendorf

BRAND

5427 R

SKU

<https://www.eppendorf.com/us-en/Products/Centrifugation/Microcentrifuges/Centrifuge-5427R-p-PF-1322725>

LIN
K

 Simport™ Scientific Micrewtube™ Microcentrifuge Tubes with Low Adhesion Surface **Thermo Fisher Scientific Catalog #23-045-258**

 Simport™ Scientific Nonsterile Screw Caps **Thermo Fisher Scientific Catalog #22-038-265**

 Thermo Scientific™ PCR Plate, 96-well, low profile, skirted **Thermo Fisher Scientific Catalog #AB-0800**

 Pipet-Lite LTS Pipette L-200XLS **Rainin Catalog #17014391**

 Pipette Tips TR LTS 20µL S 960A/10 **Mettler Toledo Catalog #17014960**

Safety warnings

- ❗ Wear appropriate PPE required by EHS. Proper PPE includes lab coat, eye protection, and disposable gloves.

Ethics statement

This protocol has been approved by the Allen Institute Animal Care and Use Committee (IACUC).

PHS Assurance: D16-00781

AAALAC: Unit 1854

Before start

- Before starting, set centrifuge temperature to 4°C and ensure lid is closed.
- Collected blood should be in K3 EDTA coated tubes stored on ice.
- Blood processing should begin within 30 minutes of blood collection.

Protocol



NAME

Temporal Assessment of Immune Response

CREATED BY

Avery Weaver

Preview



Steps

40m

- 1 Within  00:30:00 of blood collection, bring samples to centrifuge and spin at  2000 x g for  00:10:00 at  4 °C .

40m



- 1.1 Once centrifugation is complete, place samples  On ice or in a rack  On ice while trying not to disturb the blood cell pellet.
- 2 Remove the top translucent plasma layer using a 20-200ul pipette and pipette tip, then transfer to a non-protein binding tube or a well of a 96 well plate intended for shipment to Olink.

Note

- Avoid drawing up red blood cells (red pellet at the bottom of the tube), if you do repeat steps 1-2.
- Olink recommends loading at least 10-20 uL of plasma per well.

- 3 Store samples in  -80 °C freezer.



Note

Samples remain stable in these conditions for at least 12 months.