

# Sample Compatibility Assessment Agreement

All fields are mandatory unless stated as optional.

Quote number: \_\_\_\_\_ Customer ID or PO (optional): \_\_\_\_\_ Customer's project number (optional): \_\_\_\_\_

Contact person/s for Deliverables (name and e-mail): \_\_\_\_\_  
List all contacts that should have access to data

Parties:

**Olink Proteomics AB**  
Org.No.559046-8632  
Uppsala Science Park,  
SE-751 83 Uppsala  
SWEDEN

**Customer (organization):** \_\_\_\_\_

VAT number (optional if outside EU): \_\_\_\_\_

E-mail for invoicing (optional): \_\_\_\_\_

Billing address: \_\_\_\_\_

## Agreement and scope

This Sample Compatibility Assessment Agreement ("Agreement") is entered into between the parties set out above (individually, a "Party" and collectively, the "Parties") for the provision of pilot pre-analysis services for protein biomarkers using Olink Proximity Extension Assay (PEA) technology analysis platforms ("Service"). The purpose of the Service is to examine the suitability and compatibility of a certain sample type (or matrix) (specified in attachment A) that has not been previously tested or sufficiently assessed for analysis with Olink analysis platforms (see below).

Customer will receive Deliverables (as defined below) based on Service results and Olink will use Service results for the sole purposes of calculating proteins detectability and for subsequent determination of suitable sample dilutions. The data from Olink's own internal and external controls will be used for assessing the quality of analysis and the performance of the chosen platform. The above-mentioned information will be used for Olink's own product and business development as well as for marketing purposes concerning the assessed sample type.

Services shall be provided by Olink itself, or through its wholly owned US subsidiary Olink Proteomics, Inc. Services are provided for research use only and not for use in diagnostic procedures. This Agreement is comprised of the Sample Form (Attachment A), Olink's General Terms and Conditions including its appendices (the "GTCs") (Attachment B) and the Sample Preparation and Shipment Terms (Attachment C) and the Quote as referenced above. Any divergent or supplementary terms and conditions contained in a purchase order from Customer shall be invalid if not explicitly agreed to in writing, and duly signed by both Parties. This Agreement must be duly signed by the Parties before shipment of Samples to Olink. Customer shall complete and return a scanned version of this Agreement along with the Sample Manifest (provided as a file) to the email address of the chosen Place of Performance (see Attachment A) before shipping the Samples.

### Platform to be used for Services

Chosen platform to be used for the Service:

- Olink® Explore
- Olink® Target 96
- Olink® Target 48

### Samples and sample information

Customer shall provide samples (the "Samples") to be used by Olink in the performance of Services. Except when Parties agree otherwise, Customer will, before shipping, prepare Samples for Services and shipping in accordance with Olink's instructions set forth in the Sample Preparation and Shipment Terms. Upon instructions from Olink, Customer will ship Samples and forward the tracking number to the relevant address as stated in the Sample Form. After completion of the Services, Olink will handle any remaining Samples as set out in the Sample Form (e.g., discarded, returned to Customer, or stored).

### Deliverables

Olink will provide the analysis results in the form and formats as stated below, each a "Deliverable" and collectively "the Deliverables".

- The analysis results in the form of NPX values (Explore and Target 96 Services) or data from the analysed protein biomarkers presented as protein concentration (pg/mL)(Target 48 Services); and
- A Certificate of Analysis (CoA), being a short report about the analysis including information on proteins detectability.

In addition to the above the following Deliverables can be also provided if agreed upon with Olink and specified in the Quote:

- Information about detectability of proteins per dilution.  Yes  No
- Information about the proteins prone to hook\*.  Yes  No

It is the Customer's responsibility to evaluate the Deliverables and decide which dilution is suitable for the particular sample type.

\*A state of antigen excess relative to the reagent antibodies resulting in falsely lower measured values. Please see <https://www.olink.com/question/what-is-the-high-dose-hook-effect/>

### Delivery and completion of Services

For Target 96 based Services, Deliverables will be provided as files to Customer via email. The Deliverables are provided to Customer and the Services are deemed completed when Olink has sent the Deliverables to Customer's Contact Person(s) email address as set forth above. Olink may provide the Deliverables to someone other than the Customer Contact upon receipt of Customer's signed, written request.

For Explore and Target 48 based Services, Deliverables will be provided to Customer via a secure cloud-based service located at eu.mydata.olink.com for Services

performed in Uppsala, or to us.mydata.olink.com for Services performed in Boston. Customer will receive login credentials and information about the cloud-based service, where Customer must have an account ("MyData account") in order to receive the Deliverables. Olink may provide login credentials to additional Customer Contacts upon receipt of Customer's signed, written request. The Deliverables are provided to Customer and the Services are deemed completed when Olink has uploaded the Deliverables to Customer's MyData account and has provided written notice to Customer's Contact Person set forth above.

**Timeline**

Olink will commence the analysis as soon as Samples and all information necessary for the analysis of Samples have arrived at Olink's premises. Estimated delivery of Deliverables is normally within 4-8 weeks from analysis initiation.

**Payment and invoicing**

Customer shall pay the agreed price for Services as stated in the Quote. Olink will invoice Customer upon completion of the Services.

**Miscellaneous**

This Agreement may be executed by the Parties in any number of counterparts, each of which when so executed and delivered shall be deemed to be an original, but all of which shall constitute one and the same agreement. The Parties agree that this Agreement, if affixed with a digital signature or signed and submitted by e-mail as a scanned document or uploaded as a signed document to the MyData account, will be deemed an original signed Agreement binding on the Parties. Each Party hereto has caused this Agreement to be executed in English, effective as from the date of the last signature below ("Effective Date"), by its duly authorized representative. The individuals executing this Agreement are duly authorized representatives with proper authority to bind their respective companies.

**Olink Proteomics AB**

**Customer**

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

# Attachment A: Sample form

All fields are mandatory unless stated as optional.

Quote number: \_\_\_\_\_

## Sample information

Specify panel(s) used for analysis: \_\_\_\_\_

Sample type: \_\_\_\_\_

Short description of Samples: \_\_\_\_\_

Method used for preparing/collecting the Samples, if applicable (e.g., collection tubes, lysis buffer, lysis buffer provider, suspension buffers, detergents, preservatives or kit extraction): \_\_\_\_\_

Specify the dilutions selected for the pilot (including neat): \_\_\_\_\_

Number of Samples in shipment: \_\_\_\_\_

## Risk assessment of samples

Please note that Olink does not accept COVID-19 Samples unless inactivated. Please download the recommended protocol for samples inactivation (<https://www.olink.com/content/uploads/2020/09/Olink-COVID-19-Inactivation-protocol.pdf>) and attach the Tritonx100 treatment certification document (<https://www.olink.com/content/uploads/2020/09/Olink-Covid-Protocol-certification.pdf>)

Have the Samples been tested for HIV, Hepatitis B and C or other blood-borne diseases?

Yes      If YES, please state:       Positive       Negative  
 No       Comment: \_\_\_\_\_

## Randomization and Samples (Olink recommends that Samples are provided in plate/tubes separate from the Samples of the main study if possible.)

Are the Samples representative of the study cohorts?     Yes     No  
(Please contact support if help is required selecting representative samples.)

Are the Samples randomized?     Yes       No

The Samples will be provided in:     Tubes       Plates

Are the Samples aliquoted in plate(s) or tubes separate from the samples of the main study?     Yes       No

Please follow the guidelines in Attachment C and attach the Sample Manifest.

Are the Samples readily diluted according to the agreed upon dilutions? (Recommended to be done by Olink Analysis Service.)     Yes       No

If NO, Olink will dilute the sample at analysis service using its own proprietary Sample diluent.

If YES, specify the buffer used in preparing the dilutions: \_\_\_\_\_

If YES provide a sample of the Sample diluent along with the shipped Samples and information about this in the Sample Manifest.

## Place of analysis

Uppsala ([service@olink.com](mailto:service@olink.com))      or       Boston ([service\\_boston@olink.com](mailto:service_boston@olink.com))

Send the tracking number to the selected site. Print out this page and place inside the parcel for identification purposes.

Estimated shipping date: \_\_\_\_\_

Shipping address (UPPSALA)	Shipping address (BOSTON)
Olink Proteomics / Analysis Service Uppsala Uppsala Science Park Dag Hammarskjölds väg 56D SE-752 37 Uppsala SWEDEN  Contact person: Lena Lindbom Phone: +46 730 66 02 03	USA Olink Proteomics / Analysis Service Boston 65 Grove Street Suite 105 Watertown, MA 02472 USA  Contact person: Caitlin Cala or Katie Lazuk Phone: +1 617 393 3933

## Sample handling after analysis

After completed analysis:     Discard samples       Return samples for a fee\*       Store samples at yearly cost\*

\*As specified in the Quote.

# Attachment B: General Terms and Conditions

## 1. General

These general terms and conditions (“GTCs”), its Appendices and the other Attachments to the Agreement shall govern Olink’s performance of the Services for the Customer. By requesting the Services, Customer accepts these GTCs and any divergent or supplementary terms and conditions provided by Customer are not accepted and shall be excluded in their entirety.

## 2. Performance of Services

2.1 Olink will perform the Services in all material respects in a safe and ethical manner, including the storage, handling and disposal of any hazardous materials and the treatment of animals, and in accordance with (i) the specification set out in the Agreement; (ii) Applicable Laws and regulations; and (iii) generally accepted and applicable professional standards of service for research use only laboratories. “Applicable Laws” means all statutes, laws, ordinances, regulations, rules, codes, constitutions, common laws, governmental orders, or other requirements or rules of law of any governmental authority applicable to this Agreement, the performance of a Party’s obligations under this Agreement, including in the provision of Services, or the exercise of Olink or Customer’s rights under this Agreement. The exclusive remedy in the event of Olink’s breach of such performance standards is reperformance of that portion of the Services that are materially affected.

2.2 The scope of the Services shall be specified in the Sample Form and Customer is solely responsible for ensuring that the Services are described in the Agreement in accordance with the requirements of Customer, and for providing all necessary information and documentation for the performance of the Services. Furthermore, Customer is solely responsible for ensuring that the Deliverables are suitable for Customer’s intended use.

2.3 Olink shall provide Customer with reports detailing the progress and other information pertaining to the Services as set forth in the Agreement or as reasonably requested by Customer from time to time.

2.4 Olink will store all records of analytical reagents, analytical procedures, testing and quality control records relating to the Agreement for ten (10) years following completion of the relevant Services. Thereafter, the records may be destroyed or continue to be stored at Customer’s request and expense.

## 3. Price and Payment

3.1 Olink will invoice Customer for Services performed according to the Quote. All prices exclude VAT and any other taxes, charges or fees, shipping and handling, which shall be borne by Customer.

3.2 Customer shall pay all amounts due within thirty (30) days of Customer’s receipt of an invoice. Each payment under the Agreement is a separate transaction, and Customer may not set-off such payments against other payments. Upon late payment, without affecting Olink’s other rights, Olink may suspend delivery, reject any future agreement, and charge Customer a late-payment charge, from the due date until paid, at the monthly interest rate of one and a half (1.5%) percent of all unpaid amounts, or the maximum amount allowed by law, whichever is greater. Olink has the right to appoint a collection agency or an attorney to recover any unpaid amounts and Customer agrees to pay all such reasonable costs of collection.

## 4. Materials Transfer

4.1 Customer shall provide Olink with Samples necessary for the performance of the Services. The Customer is solely liable for, and Olink is excused from any delay in the provision of Services or Deliverables and any increased costs due to insufficient specification of the Samples, insufficient supply of the Samples, or lack of viability or suitability for use of the Samples. All such Samples provided to Olink by Customer will remain Customer’s property and will only be used by Olink to perform the Services.

4.2 Customer is required to fully identify all Samples in the Sample Form. Customer shall provide or commission the provision of sufficient Samples to Olink in due time in order for Olink to perform the Services. Customer is solely liable for any delays and increased costs due to insufficient specification or supply of Samples to Olink.

4.3 Customer shall indemnify Olink against any third-party claims that Olink’s use of Samples or processes directed by Customer in performance of the Services infringes a third party’s intellectual property rights.

4.4 Customer represents and warrants that: (i) any Samples provided to Olink will conform to the overall description, features, function and specifications set forth in the Sample Form; (ii) any Samples provided to Olink are compliant with any applicable ethical approval policies, informed consent forms and institutional review board approvals; and (iii) Customer has the right to provide the Samples to Olink for provision of the Services.

4.5 Olink shall follow agreed upon written instructions from Customer, comply with applicable law and use reasonable care in the use, handling, storage, transportation and disposition and containment of the Samples.

4.6 Upon completion of the Services or termination of the Agreement, Olink shall comply with the Sample handling after analysis selection made by Customer in the Sample Form.

4.7 Customer shall insure any Samples provided to Olink.

## 5. Personal Data

5.1 Customer shall only provide fully anonymized or pseudonymized personal data relating to the Samples.

5.2 Olink will comply with all applicable data protection laws and regulations in force when processing such data during the performance of the Services.

5.3 Olink will only process personal data in accordance with Customer’s written instructions under the Agreement, including Appendix 1 and Appendix 2 if Boston is chosen as the place of analysis. Olink will not transfer personal data to a third country or an international organisation unless required to do so by law. In case of a legally required transfer, Olink shall inform Customer of such requirement before processing, unless prohibited by law. All Olink staff who are authorized to process the personal data are committed to confidentiality. Olink has implemented appropriate technical and organisational measures to ensure a level of security appropriate to the risk associated with the processing as summarized in Appendix 1. Olink shall not engage another processor without prior specific or general written authorization of Customer. Olink will reasonably cooperate with Customer to fulfil its’ obligations to data subjects. Olink will reasonably assist Customer in ensuring compliance with requirements on security of processing. Olink will delete or return all the personal data to the Customer after completion of the Agreement unless applicable law requires storage of the personal data.

5.4 If Customer requires any specific procedures regarding the treatment of data under this Agreement, in addition to applicable laws and regulations, including the introduction of a data transfer agreement, such requirements must be agreed upon separately in writing, and will be subject to costs when outside the standard services provided by Olink.

## 6. Intellectual Property

6.1 As between the Parties, Customer owns: (i) all Samples and Sample related data provided by Customer or Customer’s designee to Olink; (ii) data resulting from Olink’s analysis of the Samples in the form of NPX values or data from the analyzed protein biomarkers presented as protein concentration (pg/mL) as applicable (the “Results”).

6.2 Olink shall have the right to use deidentified data in the form of numerical values arising from the Services for the purposes of: (i) quality controls; (ii) monitoring performance of Olink products; (iii) product development; (iv) and marketing. For clarity this includes Olink using numerical NPX- or pg/ml values from the samples for determining proteins detectability and subsequent optimal dilutions.

6.3 Any materials, methodologies, processes, computer software and code, standard operating procedures, personnel information, or intellectual property used by Olink or supplied by Olink to Customer in connection with the Services, will remain Olink’s property (“Olink Intellectual Property”). Furthermore, Olink retains and shall own as its own property, all future rights, title and interest in and to any and all inventions, processes, technology, know-how, trade secrets, improvements, other intellectual properties and other assets that have been developed by Olink during the course of providing the Services (“Olink Developed Intellectual Property”). Customer covenants and agrees not to make any claim to all or any portion of the Olink Intellectual Property or Olink Developed Intellectual Property.

## 7. Delays

Unless specifically agreed otherwise by Olink, all timelines set out in the Agreement are estimates only. Olink will try to meet any such specified timelines, depending on availability and any lead times that may apply. Olink will promptly inform Customer of any anticipated deviation from the timeline and the reasons therefore and effects thereof, however, Customer may not hold Olink liable for any losses, expenses or damages caused by a delivery after a stated delivery date unless agreed by Olink in writing. If Customer delays the Agreement or suspends performance of the Agreement, Customer shall be liable to pay all costs and expenses incurred by Olink due to the delay and the Parties will adjust all timelines to reflect additional time required due to the delay or suspension.

## 8. Inspections and Audits

8.1 Customer may, upon at least thirty (30) days’ prior written notice to Olink, inspect and audit Olink’s facilities and any documents relating solely to the Services and only as necessary to ensure that the Services are being performed in accordance with the Agreement and applicable laws and regulations. Inspections and audits shall be conducted during normal business hours. Olink may request that auditing personnel sign non-disclosure agreements to ensure regulatory and contractual confidentiality.

8.2 Olink will make available to Customer all information necessary to demonstrate compliance with its obligations under Clause 5.3 and will cooperate as reasonably necessary with audits, including inspections, conducted by Customer or another auditor mandated by the Customer.

## 9. Limited Warranties and Limitation of Liability

9.1 Olink provides no warranty, express or implied, covering the Results and/or any statistical analysis that may be provided with the Results. To the maximum extent permitted by law, Olink shall not be liable to Customer, whether in tort, contract or

otherwise, for any special, punitive, indirect or consequential losses (including, without limitation, lost profits and loss of data). Notwithstanding anything to the contrary, Olink's aggregated liability, howsoever arising, shall in no event exceed the compensation which at that time has actually been received from Customer under the Agreement.

#### 10. Force Majeure

A Party will not be held responsible for failure or delay in the performance of any obligation under this Agreement, except for any payment obligations, if such failure or delay is due to any causes that are beyond its reasonable control and not to its acts or omissions, including such causes as acts of God, flood, severe storm, earthquake, civil disturbance, lockout, riot, order of any court or administrative body, embargo, acts of government, war (whether or not declared), acts of terrorism, epidemics, pandemics, or other similar causes (each, a "Force Majeure Event"). If the performance of any obligation under this Agreement by a Party, except for payment obligations, is prevented, restricted or interfered with by reason of a Force Majeure Event, the Party whose performance is so affected, upon giving prompt notice to the other Party, will be excused from such performance to the extent of such Force Majeure Event, provided that the Party so affected will take all reasonable steps to avoid or remove such causes of non-performance and will continue performance hereunder with dispatch whenever such causes are removed.

#### 11. Confidentiality

Olink and Customer shall each keep confidential all material and information received from the other Party, however, only if conspicuously marked as confidential and only disclose it to its employees. These restrictions will end five (5) years after the disclosure of such information. The confidentiality and non-use obligation shall, however, not be applied to material and information which, (i) is generally available or otherwise public; (ii) the party has received from a third party without any obligation of confidentiality; (iii) was in the possession of the receiving Party prior to receipt of the same from the other Party without any obligation of confidentiality related thereto; or (iv) a Party has independently developed without using material or information received from the other Party.

#### 12. Subcontractors

Olink may, without Customer's prior consent, use subcontractors for the performance of the Services or part thereof. Olink shall always be responsible for any work of subcontractors retained directly by Olink.

#### 13. Termination

13.1 The Parties shall be entitled to terminate the Agreement upon notification of termination to the other Party if (i) the other Party fails to perform or otherwise is in breach of a material obligation under the Agreement, considering that if Customer fails to make timely payments pursuant to the Agreement, such non-payment shall always be considered material breach of Customer's obligations under the Agreement; or (ii) the other Party goes into liquidation or files or has filed against it, a petition for bankruptcy, makes an assignment for the benefit of creditors, has a receiver appointed for it or any of its assets, or otherwise takes advantage of or is subject to any statute or law designed for relief of debtors. Termination shall become effective if the breaching party does not cure the breach within thirty (30) days of written notice. Termination will be without prejudice to any rights which may have accrued to either Party before termination.

13.2 Upon termination, Olink shall be entitled to compensation and costs for any Services performed and any additional work as reasonably necessary as a result of the termination and winding down of the activities under the Agreement, or as otherwise agreed by the Parties.

13.3 The rights and obligations of the Parties under the Agreement, which by intent or meaning have validity beyond such termination, shall survive the termination of the Agreement.

#### 14. Miscellaneous

14.1 The Agreement shall be deemed effective when the Parties have agreed and signed the Agreement; The Agreement will be binding upon and shall inure to the benefit of the Parties, and their respective successors and permitted assigns.

14.2 If any provision of the Agreement is invalid or is unenforceable, the remainder of the Agreement will remain in effect.

14.3 Customer acknowledges that Olink is in the business of providing services for a variety of organizations other than Customer. Accordingly, nothing in this Agreement shall preclude or limit Olink from providing services for other parties or otherwise conduct its business.

14.4 Neither Party may assign the Agreement, or any portion thereof, to any third party, without the other Party's consent, except that Olink may assign its right to receive payment hereunder.

14.5 Olink is an independent contractor responsible for its own employees and shall independently conduct the performance of all Services.

14.6 If applicable to the Service, Customer accepts that the Deliverables are provided to Customer by being uploaded to a designated secure cloud-based service and that Customer will receive a notification to a designated email address when the upload is finished. Customer acknowledges that having an account at the cloud-based service designated by Olink is necessary in order to receive the Deliverables.

14.7 The Parties acknowledge and agree that: (i) a breach or threatened breach by a Party of any of its confidentiality or intellectual property obligations under this Agreement may give rise to irreparable harm to the non-breaching Party for which monetary damages would not be an adequate remedy; and (ii) in the event of a breach or a threatened breach by a Party of any such obligations, the non-breaching Party may, in addition to any and all other rights and remedies that may be available to it at law, at equity or otherwise in respect of such breach, be entitled to equitable relief, including a temporary restraining order, an injunction, specific performance, and any other relief that may be available from a court of competent jurisdiction, without any requirement to post a bond or other security, and without any requirement to prove actual damages or that monetary damages will not afford an adequate remedy.

#### 15. Governing Law

The Agreement shall be construed and determined by the substantive laws of Sweden, without regard to provision on the conflict of laws.

#### 16. Dispute resolution

Any dispute or claim arising out of or in connection with this Agreement or the breach, termination or invalidity thereof, shall be exclusively submitted to the district court of Uppsala, Sweden, in the first instance.

# Appendix 1 to the General Terms and Conditions (GTCs)

## Specifications of the processing of personal data

- Purposes**  
Storage and protein biomarker discovery by Olink to identify proteins that have capabilities in characterizing or defining health or disease for transfer of the results to Customer and anonymization of data for future use.
- Categories of personal data**  
Sample ID/Pseudonymized Subject ID.  
Biometric data (analysis results).
- Categories of data subjects**  
A combination of healthy persons and persons with various disease states.
- Processing activities**  
Laboratory analyses, storage and transfer of data and anonymization of data.
- Location for the processing of personal data**  
Olink's laboratory at Uppsala Science Park in Uppsala, Sweden or Olink Proteomics Inc.'s laboratory in Watertown, Massachusetts USA, if that is the chosen Place of Performance (see Appendix 2).
- Data protection**  
Pseudonymised/de-identified samples in tubes or plates will be provided to Olink.

## Measures for data protection

Organizational measures for data protection	Technical measures for data protection
<ul style="list-style-type: none"><li>Personal user accounts</li><li>Password policy</li><li>Access policy</li><li>Disaster and recovery plan</li><li>Yearly penetration tests and vulnerability scans</li><li>Patch policy</li><li>Production systems separated from other systems</li></ul>	<ul style="list-style-type: none"><li>All data is stored on encrypted disks following industry standards</li><li>Antivirus software on all systems</li><li>Multi-factor authentication for external access to systems</li><li>Account lockout duration after three failed attempts</li><li>Redundant backups</li></ul>

# Appendix 2 to the GTCs

Authorized sub-processor	Location (including country)
Olink Proteomics, Inc. Olink Proteomics, Inc. performs the service on behalf of Olink Proteomics AB in Boston if that is the chosen site of analysis. A Data Processing Agreement is in place between Olink Proteomics Inc. and Olink Proteomics AB.	65 Grove Street Watertown, MA 02472 USA
Amazon Web Services (AWS) Relevant for Explore and Target 48 Services only. AWS provides and maintains space for Olink Proteomics AB's MyData cloud service. The processing involves passive provision of digital storage space used by Olink for data handling and delivery.	Servers for Uppsala-based services are located in Frankfurt, Germany.  Servers for Boston-based services are located in Virginia, USA.

[www.olink.com](http://www.olink.com)

Olink Proteomics, Dag Hammarskjölds väg 52B, SE-752 37 Uppsala, Sweden



# Attachment C: Sample Preparation and Shipment Terms

## Sample randomization and selecting representative samples for the pilot study

Since protein composition differs between different sample types, running a pilot study ensures that you run your samples at the optimal conditions (i.e., dilutions) under which the data fall within the dynamic linear range of the assay and the assay proteins are less prone to hook. (<https://www.olink.com/question/what-is-the-high-dose-hook-effect/>).

### When running a pilot study, Olink recommends the following:

- A minimum of 6-12 samples (for Target 96 and Target 48) and 8-24 samples (for Explore).
  - The samples of the novel matrix should correspond to and represent the different cohorts in the study (e.g, both case and controls, age, sex, different treatments, etc.).
  - If high inter-sample variability is suspected (e.g., high-variability in your tissue-culture protocol, extended sample processing time or different concentration of the samples), increasing the number of samples representing the introduced variabilities is advised to identify possible effects on the new matrix analysed.
- Each sample should be tested with at least 3 dilutions.
  - Olink panels are developed with the composition and abundance of proteins in plasma and serum in mind. What dilutions should be used depends on what the customer expects to find and in what concentrations. This should be checked against the analytical measuring range found in the data validation package for each product or panel (check validation data for each panel/product at the following link <https://www.olink.com/products/>)
  - Olink support team can help select the most appropriate dilutions based on the expected protein concentrations in the new matrix and panel selection.
- If you are running tissue culture samples where high variability is expected between cultures (i.e., differentiation of cells), it is advisable to test replicate samples to determine the variability within your methodology. This will help you calculate the power needed for your study.
- A blank buffer sample should be included in the pilot study to rule out any effects of the used buffer on assay performance.

## Pre-processing of samples

Olink advises customers to randomize and aliquot all samples including the pilot study samples simultaneously. This help minimize the pre-analytical technical variation in your sample prior analysis (e.g., temperature, transport, freeze-thawing). The "**Pre-analytical variation in protein biomarker research**" white paper describes the factors that can introduce pre-analytical variation in protein biomarker research in plasma and serum, which can be also applied to any other alternative matrix (white papers are found at <https://www.olink.com/resources-support/white-papers-from-olink/>). If you need help to select, randomize or discuss suitable dilutions for your samples, please contact the support team at [support@olink.com](mailto:support@olink.com), or Analysis Service at [service@olink.com](mailto:service@olink.com) or [service\\_boston@olink.com](mailto:service_boston@olink.com) (US customers).

## Sample preparation

For pilot samples sent in tubes or in plate(s) separate from the samples of the main study (we recommend shipping the samples for the pilot in tubes/plate(s) separate from the samples of the main study), please ensure the following:

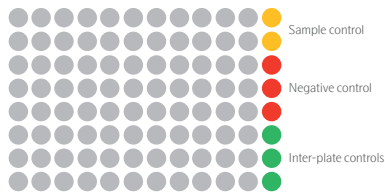
- Supply  $\geq 40 \mu\text{L}$  of each sample in temperature-resistant, non-protein binding plastics.
- If pilot samples are sent in a plate, use a PCR-clean 96-well PCR-plate, preferably with full skirt (e.g. ThermoFisher Scientific #AB0800 with MicroAmp seal #4306311 from ThermoFisher Scientific). Plates and seals need to be -80°C-/dry-ice- resistant and easily resealable. Ensure that your samples are **randomized** or in the order ready to be run and compatible with our plate layout, (see below) If more than one sample type is included, please contact Olink Analysis Service for instructions.
- If pilot samples are sent in tubes, the tubes should be PCR-clean, -80°C-/dry-ice- resistant and easily resealable.
- **Please make sure tubes are tightly sealed and for plates**, ensure that each well is **separately sealed** using an adhesive film or individual seals.
- **Clearly mark sample tubes** with a simple alphanumeric code that you can later identify ("A, B, C", "1, 2, 3", or "A1, A2, A3") using **temperature-resistant labels** or **marker pen**. Mark the Box(es) with the quote number. **Clearly mark sample plates** with the quote number and, if more than one plate, a simple alphanumeric code for each plate.
- Use **pseudonymized** sample identification names/numbers, both in the Sample Manifest and on sample tubes. No duplicate names are allowed.
- **Plates**; use the same plate ID in the Sample Manifest as is clearly labeled on the plate. **Tubes**; sample ID on the tube needs to correspond to sample ID in the Sample Manifest.

If pilot samples **cannot be sent** in tubes/plate(s) separate from the samples of the main study and have to be taken from plate(s) containing all samples (**Not recommended**), please ensure the following:

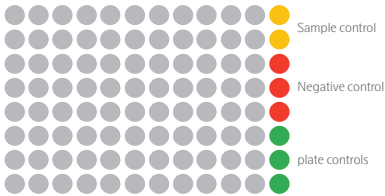
- In addition to the instructions stated above regarding the samples volume, physical properties of tubes/plates, sealing of plates/tightening of tubes, and samples marking and identification, please ensure the following:
- Please ensure that the samples chosen for the pilot are easy to identify and access, e.g., all samples included in the pilot are plated in the first column of the same plate, or are all found in the same box of samples tubes.
- Ensure that all your samples are **randomized** within and across plates, or in the order ready to be run and compatible with our plate layout, (see below). If more than one sample type is included, please contact Olink Analysis Service for instructions.

## Plate layout

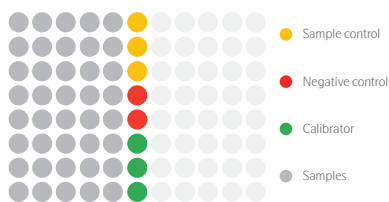
### Explore



### Target 96



### Target 48



For Target 96 and Explore, leave **A12-H12** (12<sup>th</sup> column) empty for controls supplied by Olink. For Target 48, leave **A6-H12** (column 7-12) empty for controls supplied by Olink. Start in A1 and fill samples **column wise**.

## Sample manifest (a sample log provided in an Excel file)

Fill out the *Sample Manifest* and either upload to the Customer's MyData account at Olink's cloud based service (for **Explore and Target 48**) or email to [service@olink.com](mailto:service@olink.com) or [service\\_boston@olink.com](mailto:service_boston@olink.com) (for **Target 96**). Please clearly state the quote number in the file name.

*Sample Manifest* must be uploaded **before** sending the samples.

- Fill out Olink's *Sample Manifest* with **Plate ID** (labeling name on your sample plate), **Well ID** (well number on the sample plate for the specific sample) and **Unique Sample ID** (name of the sample, please ensure that each sample name only occur once).
- Choose the **Sample type** for each sample from the list in the column named *Sample type* and the volume supplied in *Sample volume*.
- Any additional information regarding the samples can be filled out in the column named *Additional information* (optional).
- Fill out **one** *Sample Manifest* file per study/quote and in **one** sheet of the Excel file. If you have **multiple** plates, place them after each other in the same sheet.
- Use **Unique Sample ID**. For duplicate samples/names, add an extra discriminator (i.e. Sample A\_1 and Sample A\_2).
- Use <30 characters (a-z, 0-9, \_-#%()) including spaces. Do not use ";", ",", or new line.

**If the above is not adhered to or otherwise incorrect, the Sample Manifest will be returned to the customer. This could delay the analysis of your samples and cause additional costs, if applicable.**

## Shipping

- Samples should be shipped **on dry ice**, sufficient for shipment to the appropriate Analysis Service lab.
- Make sure the plates are securely sealed, add extra adsorption paper in case of leakage and make sure to place the samples in a sealed bag.
- Ensure that the heavy dry ice will not damage the samples during shipment.
- Contact your preferred courier for local regulations regarding appropriate labelling for risk assessment and shipment of your human samples on dry ice.
- **Place a document referencing the Quote number identifying the samples and the project they belong to (for example a copy of the pilot study agreement or Attachment A of the Analysis Service Agreement).**
- Send the tracking number and courier company name to the corresponding service unit; [service@olink.com](mailto:service@olink.com) or [service\\_boston@olink.com](mailto:service_boston@olink.com) and add quote number in the communication.
- *Note:* Our business hours are Mon-Fri 8 a.m. to 5 p.m.
- Upon arrival, the samples and documents will be examined, and you will receive a confirmation email. Samples will be stored at -80°C.