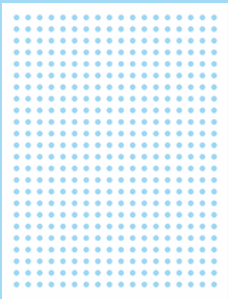


# Certificate of Analysis



Olink<sup>®</sup> Explore

|                                 |                                       |
|---------------------------------|---------------------------------------|
| PROJECT NAME                    | Demo                                  |
| ISSUE DATE                      | 2020-11-13                            |
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## 1. Project information

| No. of samples | No. of plates | Normalization method    |
|----------------|---------------|-------------------------|
| 212            | 3             | Intensity normalization |

### 1.1 Sample type

Plasma

### 1.2 Project specific comments

N/A

## 2. Quality control

Three internal controls are added to each sample and two of them are used to monitor the quality of assay performance, as well as the quality of individual samples:

- 1 Incubation control
- 2 Amplification Control

The following parameters are evaluated in the Quality Control (QC):

- 1 The average matched counts<sup>1</sup> for each sample. To pass QC, there should be at least 500 counts, otherwise the sample receives a QC warning status.
- 2 The deviation from the median value of the incubation- and amplification controls for each individual sample. To pass QC, the deviation should not exceed +/-0.3 NPX for either of the internal controls, otherwise the sample will receive a QC warning status.

<sup>1</sup>The number of reads for each specific combination of sample and assay

Data from all samples is included in the data output file. Samples that did not pass the QC are indicated in columns named "QC warning". Data points from samples that do not pass QC should be treated with caution.

### 2.1 QC summary

| Olink Panel                 | No. of samples that passed<br>QC / Total no. of samples | Passed samples (%) |
|-----------------------------|---|--------------------|
| Explore 384 Cardiometabolic | 175 / 212   | 83                 |
| Explore 384 Inflammation    | 175 / 212   | 83                 |
| Explore 384 Neurology       | 178 / 212   | 84                 |
| Explore 384 Oncology        | 186 / 212   | 88                 |

## 2.2 Intra- and Inter-assay Coefficient of Variance (%CV)

Intra- and inter-CVs are based on the control samples (pooled plasma samples) included on each sample plate. Calculations are made for each assay using NPX-values. Average % CV for all assays on a panel is presented in section 2.2.1. The number of assays with CVs within defined intervals are presented in sections 2.2.2 and 2.2.3.

### 2.2.1 Average %CV

| Olink Panel                 | Intra-assay %CV | Inter-assay %CV |
|-----------------------------|-----------------|-----------------|
| Explore 384 Cardiometabolic | 9               | 15              |
| Explore 384 Inflammation    | 10              | 16              |
| Explore 384 Neurology       | 11              | 17              |
| Explore 384 Oncology        | 11              | 17              |

### 2.2.2 Intra-assay %CV distribution

| Olink Panel                 | <5% | 5-10% | 10-15% | >15% | N/A* |
|-----------------------------|-----|-------|--------|------|------|
| Explore 384 Cardiometabolic | 119 | 95    | 37     | 81   | 38   |
| Explore 384 Inflammation    | 83  | 114   | 64     | 60   | 49   |
| Explore 384 Neurology       | 65  | 100   | 57     | 90   | 59   |
| Explore 384 Oncology        | 76  | 92    | 54     | 89   | 59   |

\*Assays where CV is not possible to calculate

### 2.2.3 Inter-assay %CV distribution

| Olink Panel                 | <10% | 10-20% | 20-30% | >30% | N/A* |
|-----------------------------|------|--------|--------|------|------|
| Explore 384 Cardiometabolic | 117  | 142    | 55     | 20   | 36   |
| Explore 384 Inflammation    | 86   | 168    | 56     | 22   | 38   |
| Explore 384 Neurology       | 86   | 144    | 60     | 32   | 49   |
| Explore 384 Oncology        | 77   | 146    | 68     | 27   | 52   |

\*Assays where CV is not possible to calculate

## 3. Protein detection results

### 3.1 Number of proteins detected in >50% of the samples

| Olink Panel                 | No. of detected proteins / Total no. of proteins | Detected proteins (%) | Expected detectability in EDTA plasma* (%) |
|-----------------------------|--|-----------------------|--|
| Explore 384 Cardiometabolic | 345 / 370  | 93                    | N/A  |
| Explore 384 Inflammation    | 314 / 370  | 85                    | N/A  |
| Explore 384 Neurology       | 307 / 371  | 83                    | N/A  |
| Explore 384 Oncology        | 313 / 370  | 85                    | N/A  |

\*The expected detectability is based on EDTA plasma from healthy donors. These values are intended as guidelines only and protein levels are expected to vary depending on different pathological conditions, sample matrices, or sample preparation methods.

### 3.2 Data output

Data is presented as NPX (Normalized Protein eXpression) values. NPX is Olink's relative protein quantification unit on log<sub>2</sub> scale. NPX values from Olink® Explore 384 and Olink® Explore 1536 (a combination of 4 separate Olink® Explore 384 panels) are calculated from the number of matched counts, using NGS (Next Generation Sequencing) as readout. The NPX values are presented in a separate results file delivered in the MyData cloud. Data values for measurements below limit of detection (LOD) are reported for all samples.