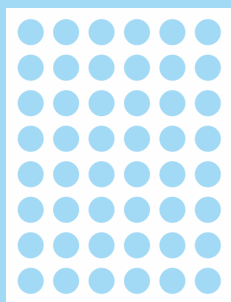


Certificate of Analysis



Olink[®] Target 96

PROJECT NAME	20211713_Lo
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1. Project information

Olink panel	No. of Samples	No. of Plates	Normalization Method
Target 96 Cardiometabolic	34	1	IPC Normalized
Target 96 Cardiovascular II	34	1	IPC Normalized
Target 96 Cardiovascular III	34	1	IPC Normalized
Target 96 Immune Response	34	1	IPC Normalized
Target 96 Immuno-Oncology	34	1	IPC Normalized
Target 96 Inflammation	34	1	IPC Normalized
Target 96 Oncology II	34	1	IPC Normalized

1.1 Sample type

Human EDTA Plasma

2. Quality control

Four internal controls are added to each sample to monitor the quality of assay performance, as well as the quality of individual samples. The quality control (QC) is performed in two steps:

1. Each sample plate is evaluated on the standard deviation of the internal controls. This should be below 0.2 NPX. Only data from sample plate that pass this quality control will be reported.
2. The quality of each sample is assessed by evaluating the deviation from the median value of the controls for each individual sample. Samples that deviate less than 0.3 NPX from the median pass the quality control.

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. [See 4]

2.1 Summary of Quality Control

Olink panel	No. of samples that passed QC / Tot no. of samples	Passed samples (%)
Target 96 Cardiometabolic	34 / 34	100
Target 96 Cardiovascular II	33 / 34	97
Target 96 Cardiovascular III	34 / 34	100
Target 96 Immune Response	34 / 34	100
Target 96 Immuno-Oncology	33 / 34	97
Target 96 Inflammation	34 / 34	100

Olink panel	No. of samples that passed QC / Tot no. of samples	Passed samples (%)
Target 96 Oncology II	33 / 34	97

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

Intra and inter CVs are based on control samples (pooled plasma samples) included on each plate. Calculations are made using linear NPX-values. The number of assays with CVs within defined intervals are presented.

2.2.1 Average %CV

Olink panel	Intra-Assay %CV Reference intra CV <15%	Inter-Assay %CV Reference inter CV <25%
Target 96 Cardiometabolic	7	N/A
Target 96 Cardiovascular II	5	N/A
Target 96 Cardiovascular III	2	N/A
Target 96 Immune Response	13	N/A
Target 96 Immuno-Oncology	4	N/A
Target 96 Inflammation	3	N/A
Target 96 Oncology II	7	N/A

2.2.2 Intra-Assay %CV Distribution

Olink panel	No. of proteins with %CV within defined intervals				N/A
	<5%	≥5 - <10%	≥10 - <15%	≥15%	
Target 96 Cardiometabolic	30	42	11	3	6
Target 96 Cardiovascular II	48	32	7	0	5
Target 96 Cardiovascular III	82	10	0	0	0
Target 96 Immune Response	8	12	19	17	36
Target 96 Immuno-Oncology	62	17	3	0	10
Target 96 Inflammation	55	11	1	0	25
Target 96 Oncology II	29	49	10	2	2

2.2.3 Inter-Assay %CV Distribution

Not applicable.

3. Protein detection results

3.1 Number of proteins detected in >75% of the samples

Olink panel	No. of detected proteins / Tot no. of proteins	Detected proteins (%)	Expected detectability in EDTA plasma* (%)
Target 96 Cardiometabolic	89 / 92	97	>90
Target 96 Cardiovascular II	92 / 92	100	>90
Target 96 Cardiovascular III	92 / 92	100	>90
Target 96 Immune Response	75 / 92	82	>80
Target 96 Immuno-Oncology	83 / 92	90	>80
Target 96 Inflammation	73 / 92	79	>75
Target 96 Oncology II	91 / 92	99	>90

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

3.2 Data output

Data is presented as normalized protein expression (NPX) values, Olink Proteomics' arbitrary unit on log2 scale. [See 4]

The NPX values are presented in a separate data file. Data points for samples that did not pass QC are written in red text. Data values for measurements below limit of detection (LOD) are reported for all samples. Cells containing data values below LOD are indicated with a pink background. [See 4]

4. Further information

Collection of direct links to pages containing important information relating to Olink data generation and processing, as well as additional support content:

<https://www.olink.com/key-links/>

5. Samples that did not pass QC

	Target 96 Cardiometabolic	Target 96 Cardiovascular II	Target 96 Cardiovascular III	Target 96 Immune Response	Target 96 Immuno-Oncology	Target 96 Inflammation	Target 96 Oncology II
Sample ID							
CIDp770000431	x		x		x		