

Gyrolab® PLBL2 Kit

For the detection of PLBL2

Product Information Sheet

D0039095/A

In combination with Gyrolab® system, the kit delivers:

- Automated workflows – reduced manual operations
- Broad dynamic range – over three logs
- Fast turnaround – 96 data points in 80 minutes
- High throughput – up to 960 data points in a working day



The assay

Gyrolab PLBL2 Kit has been developed to quantify PLBL2 with a sandwich immunoassay run on Gyrolab Bioaffy™ 1000 HC CD (Figure 1).

The kit contains ready-to-use capture- and detection reagents that are pre-labeled with biotin and Alexa Fluor® 647, respectively. Pre-diluted standards are supplied ready-to-use, which minimizes pipetting errors and maximizes analysis consistency and quality of results. The biotinylated anti-PLBL2 antibody is automatically introduced into a microstructure in the Gyrolab Bioaffy 1000 HC CD and

captured on streptavidin-coated beads in the flow-through affinity column. Samples containing PLBL2 are introduced into the microstructures and captured by the immobilized anti-PLBL2 antibody. Bound PLBL2 is then detected using the fluorophore-labeled anti-PLBL2 detection antibody. Results are evaluated using Gyrolab Evaluator or exported to a LIMS. All Gyrolab software programs are designed for 21 CFR part 11-compliance, ensuring that assays can be developed and transferred in regulated environments.

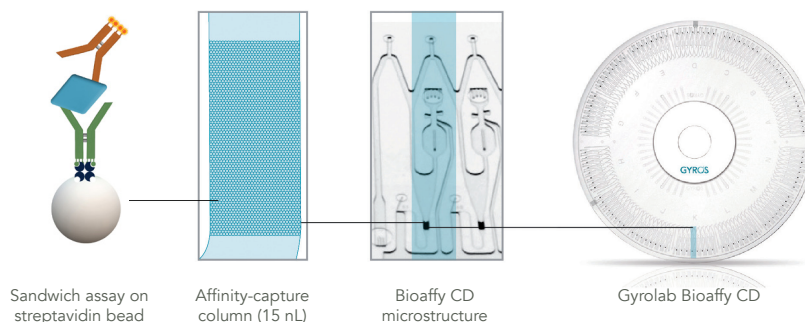


Figure 1. Sandwich immunoassay format on a Gyrolab Bioaffy 1000 HC CD

Assay performance

Broad dynamic range

Gyrolab PLBL2 Kit demonstrates a broad, three-log working range (Table 1) that minimizes the number of dilutions needed, with concentrations ranging from $\mu\text{g/mL}$ down to sub- ng/mL . Limit of Detection (LOD) was determined as the concentration where the response equalled two standard deviations above the average blank response.

Table 1. Kit working range

LOD (ng/mL)	LLOQ (ng/mL)	ULOQ (ng/mL)
< 0.15	~ 0.2	~ 1 000

High precision, accuracy and reproducibility

Data for standard curves and QC samples over the working range run in triplicate in six runs on five instruments and by two operators are shown in Figure 2, Table 2 and Table 3.

Table 2. Precision data for 5 QC samples covering the assay working range

Sample Name	Expected conc (ng/mL)	Av. Measured conc (ng/mL)	Intra-run CV (%)	Inter-run CV (%)
QC1	1000	1074	7.8	8.4
QC2	800	886	9.8	11
QC3	10	10	4.5	4.9
QC4	0.6	0.56	10	11
QC5	0.2	0.19	14	16

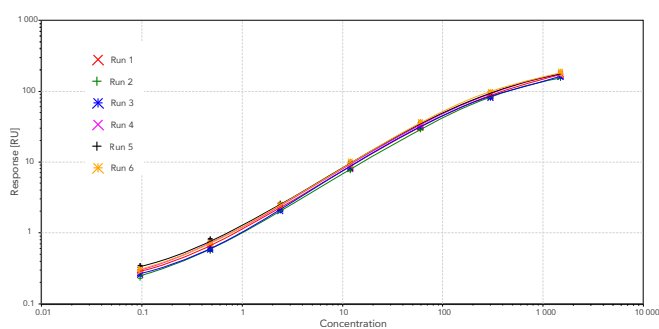


Figure 2. Overlay plot from standard curves from six runs on five instruments

Table 3. Inter- and intra-run precision data for the standard curve over the assay working range

	Expected conc (ng/mL)	Av. Measured conc (ng/mL)	Intra-run CV (%)	Inter-run CV (%)
Blank	0	0		
Standard 1	1500	1523	12	14
Standard 2	300	298	7	8.1
Standard 3	60	61	4.2	4.7
Standard 4	12	12	6.9	7.9
Standard 5	2.4	2.5	5.1	5.7
Standard 6	0.48	0.48	10	11
Standard 7	0.096	0.098	17	19

Abbreviations

LOD, Limit Of Detection; LLOQ, Lower Limit Of Quantification; ULOQ, Upper Limit Of Quantification; CV, Coefficient Of Variation

Ordering Information

Product Number	Product name	Description
P0020732	Gyrolab PLBL2 CD50 Kit	Reagents and consumables to generate 4800 datapoints (50 CD's)
P0020736	Gyrolab PLBL2 Standard	For spiking experiments
P0020737	Gyrolab PLBL2 Sample Dilution Buffer	Extra sample dilution buffer 25 mL

Content

Gyrolab PLBL2 Kit Contents

Each kit contains reagents and consumables for fifty (50) CDs, for generation of 4800 data points:

- Gyrolab PLBL2 Kit Reagents (for contents, see below)
- Gyrolab Bioaffy 1000 HC CD
- PCR plates
- Microplate Foil
- Gyrolab Wash buffer pH 11

Gyrolab PLBL2 Kit Reagents:

Capture Reagent, biotinylated anti-PLBL2, ready-to-use solution

Detection Reagent, fluorophore-labeled anti-PLBL2, ready-to-use solution

PLBL2 Standard: pre-diluted, ready-to-use solutions

Wash Buffer 1

Wash Buffer 2

PLBL2 Sample Dilution Buffer

Storage conditions

Gyrolab Bioaffy 1000 HC CD

Refrigerate at +4 °C to +8°C, unopened package.

Shelf life (unopened package): Minimum 12 months after delivery.

Gyrolab PLBL2 Kit Reagents

Refrigerate at +4°C to +8°C. Do not freeze.

Shelf life (unopened package): see product label.

RELATED PRODUCTS

Gyrolab Bioaffy 1000 HC Assay Toolbox

For users who wish to develop assays with in-house reagents based on components of the ready-to-use Gyrolab kits.

P0020667	Gyrolab Bioaffy 1000 HC Assay Toolbox
P0020668	Gyrolab Bioaffy 1000 HC AssaToolbox CD50

Please note that the product is currently available for purchase only in Europe.

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