



## Calibrator A

Calibrator for Microdialysis Analyser

For calibration of  
 P000023 Glucose Reagent  
 P000024 Lactate Reagent  
 P000025 Glycerol Reagent  
 P000026 Urea Reagent  
 P000063 Pyruvate Reagent  
 P000064 Glutamate Reagent

### Content

Analyte	Concentration
Glucose	5.55 mmol/L
Lactate	2.5 mmol/L
Glycerol	475 µmol/L
Urea	13.3 mmol/L
Pyruvate	250 µmol/L
Glutamate	25 µmol/L

### Ordering Information

Ref. No.	Qty
P000057 Calibrator A	10 x 6 mL

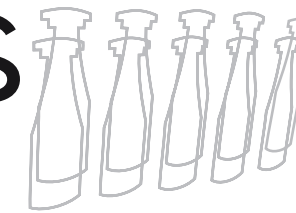


**Headquarters:**  
 MDialysis AB · Hammarby Fabriksväg 43 · SE-120 30 · Stockholm · Sweden  
 Tel: +46-8-470 10 20 · E-mail: info@mdialysis.com  
 www.mdialysis.com

**Branch office:**  
 MDialysis Inc · 73 Princeton Street, North Chelmsford · MA 01863 · USA  
 Tel: +1-(978) 251-1940, +1 866 868-9236 · Fax: +1-(978) 251-1960 · E-mail: usa@mdialysis.com

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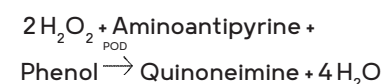
# Reagents



## Glucose

Colorimetric method for the quantitative determination of Glucose in Microdialysates.

**Measuring principle**  
 Glucose is enzymatically oxidised by glucose oxidase (GOD). The hydrogen peroxide formed reacts with phenol and 4-amino-antipyrine. This reaction is catalyzed by peroxidase (POD) and yields the red-violet colored quinoneimine. The rate of formation is measured photometrically at 546 nm and is proportional to the glucose concentration.



Default linear range: 0.1 - 25 mmol/L

### Assay Conditions

Sample volume: 0.5 µL or 2.0 µL  
 Reagent Volume: 14.5 µL or 13.0 µL  
 Linear Range: 0.1-25 or 0.02 - 6.0 mmol/L  
 Wavelength: 546 nm  
 Also required: P000057 Calibrator A

### Ordering information

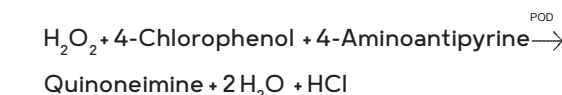
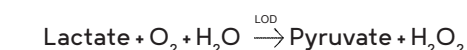
Reagent sufficient for 5 x 350 determinations

Ref. No.	Qty
P000023 Glucose Reagent	5 x 6 mL
P000057 Calibrator A	10 x 6 mL

## Lactate

Colorimetric method for the quantitative determination of Lactate in Microdialysates.

**Measuring principle**  
 Lactate is enzymatically oxidised by lactate oxidase. The hydrogen peroxide formed reacts with 4-chlorophenol and 4-amino-antipyrine. This reaction is catalyzed by peroxidase (POD) and yields the red-violet colored quinoneimine. The rate of formation is measured photometrically at 546 nm and is proportional to the lactate concentration.



Default linear range: 0.1 - 12 mmol/L

### Assay Conditions

Sample volume: 0.2 µL or 0.8 µL  
 Reagent Volume: 14.8 µL or 14.2 µL  
 Linear Range: 0.1-12 or 0.02 - 2.5 mmol/L  
 Wavelength: 546 nm  
 Also required: P000057 Calibrator A

### Ordering information

Reagent sufficient for 5 x 350 determinations

Ref. No.	Qty
P000024 Lactate Reagent	5 x 6 mL
P000057 Calibrator A	10 x 6 mL

## Reagents for Microdialysis Analyser

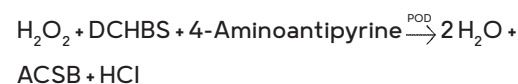
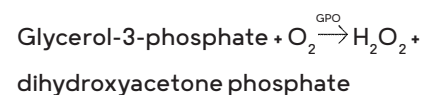


### Glycerol

Colorimetric method for the quantitative determination of Glycerol in Microdialysates.

#### Measuring principle

Glycerol is phosphorylated by adenosine triphosphate (ATP) and glycerol kinase (GK) to glycerol-3-phosphate, which is subsequently oxidized in the presence of glycerol-3-phosphate oxidase (GPO). The hydrogen peroxide formed reacts with 3,5-dichloro-2-hydroxy-benzene sulphonic acid (DCHBS) and 4-amino-antipyrine. This reaction is catalyzed by peroxidase (POD) and yields the red-violet colored quinoneimine. The rate of formation is measured photometrically at 546 nm and is proportional to the glycerol concentration.



Default linear range: 10 - 1500  $\mu\text{mol/L}$

### Assay Conditions

Sample volume: 0.5  $\mu\text{L}$  or 2.0  $\mu\text{L}$   
Reagent Volume: 14.5  $\mu\text{L}$  or 13.0  $\mu\text{L}$   
Linear Range: 10 - 1500 or 2 - 500  $\mu\text{mol/L}$   
Wavelength: 546 nm  
Also required: P000057 Calibrator A

### Ordering information

Reagent sufficient for 5 x 350 determinations

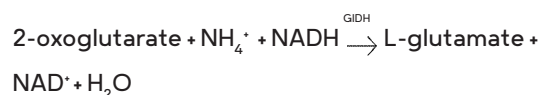
Ref. No.	Qty
P000025 Glycerol Reagent	5 x 6 mL
P000057 Calibrator A	10 x 6 mL

### Urea

UV-method for the quantitative determination of Urea in Microdialysates.

#### Measuring principle

Urea is hydrolyzed in the presence of urease to ammonium ions and carbon dioxide. The ammonium ions react with 2-oxoglutarate in the presence of glutamate dehydrogenase (GIDH) and NADH to form glutamate and NAD<sup>+</sup>. The rate of utilization of NADH is measured photometrically at 365 nm and is proportional to the urea concentration.



Linear range: 0.5 - 17 mmol/L

### Assay Conditions

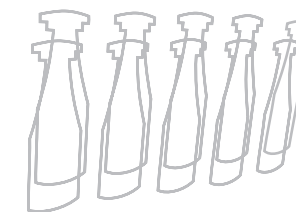
Sample volume: 0.5  $\mu\text{L}$   
Reagent Volume: 14.5  $\mu\text{L}$   
Linear Range: 0.5 - 25 mmol/L (recently prepared)  
0.5 - 17 mmol/L (after three days)  
Wavelength: 365 nm  
Also required: P000057 Calibrator A

### Ordering information

Reagent sufficient for 5 x 350 determinations

Ref. No.	Qty
P000026 Urea Reagent	5 x 6 mL
P000057 Calibrator A	10 x 6 mL

## Reagents for Microdialysis Analyser

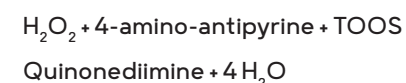
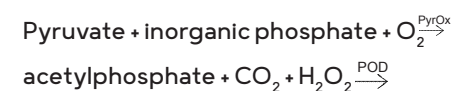


### Pyruvate

Colorimetric method for the quantitative determination of Pyruvate in Microdialysates.

#### Measuring principle

Pyruvate is enzymatically oxidized by pyruvate oxidase (PyrOx). The hydrogen peroxide formed reacts with N-ethyl-N-(2-hydroxy-3-sulfopropyl)-m-toluidine and 4-amino-antipyrine. This reaction is catalyzed by peroxidase (POD) and yields the red-violet colored quinoneimine. The rate of formation is measured photometrically at 546 nm and is proportional to the pyruvate concentration.



Default linear range: 2 - 300  $\mu\text{mol/L}$

### Assay Conditions

Sample volume: 0.5  $\mu\text{L}$  or 2.0  $\mu\text{L}$   
Reagent Volume: 14.5  $\mu\text{L}$  or 13.0  $\mu\text{L}$   
Linear Range: 10 - 1500 or 2 - 300  $\mu\text{mol/L}$   
Wavelength: 546 nm  
Also required: P000057 Calibrator A

### Ordering information

Reagent sufficient for 5 x 350 determinations

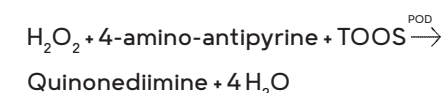
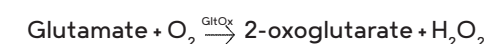
Ref. No.	Qty
P000063 Pyruvate Reagent	5 x 6 mL
P000057 Calibrator A	10 x 6 mL

### Glutamate

Colorimetric method for the quantitative determination of Glutamate in Microdialysates.

#### Measuring principle

Glutamate is enzymatically oxidized by glutamate oxidase (GltOx). The hydrogen peroxide formed reacts with N-ethyl-N-(2-hydroxy-3-sulfopropyl)-m-toluidine and 4-amino-antipyrine. This reaction is catalyzed by peroxidase (POD) and yields the red-violet colored quinoneimine. The rate of formation is measured photometrically at 546 nm and is proportional to the glutamate.



Linear range: 1 - 150  $\mu\text{mol/L}$

### Assay Conditions

Sample volume: 1.5  $\mu\text{L}$   
Reagent Volume: 7.5  $\mu\text{L}$   
Linear Range: 1 - 150  $\mu\text{mol/L}$   
Wavelength: 546 nm  
Also required: P000057 Calibrator A

### Ordering information

Reagent sufficient for 5 x 250 determinations

Ref. No.	Qty
P000064 Glutamate Reagent	5 x 4 mL
P000057 Calibrator A	10 x 6 mL