



ProFoldin

10 Technology Drive, Suite 40, Number 188

Hudson, MA 01749-2791 USA

Phone: (508) 735-2539

FAX: (508) 845-9258

www.profoldin.com

info@profoldin.com

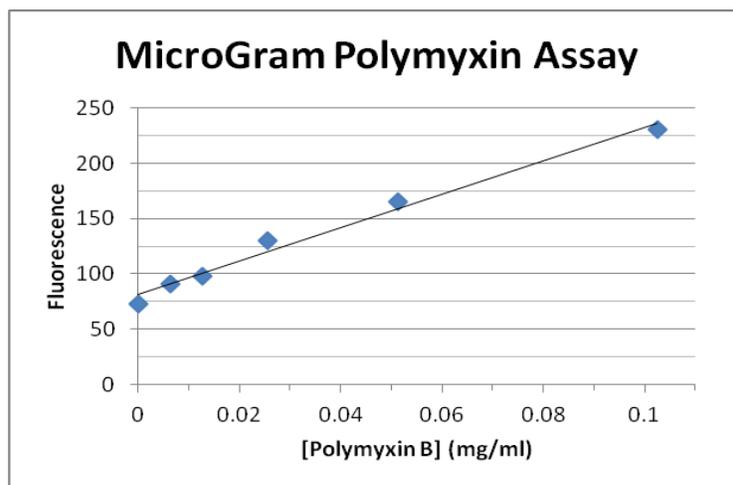
INSTRUCTIONS

ProFoldin MicroGram Polymyxin Assay Kit

CATALOG NUMBER MPX200

INTRODUCTION

Polymyxins are polypeptide antibiotics that bind lipopolysaccharide (LPS) and disrupt bacterial membranes. They are used for the treatment of Gram-negative bacterial infections. Since polymyxins increase permeability of the bacterial membrane system, they are also used for enhanced release of secreted toxins from bacteria. The MicroGram Polymyxin Assay Kit is designed for measurement of micrograms / ml concentrations of polymyxins. The assay is based on increase of fluorescence at 535 nm of the assay reagent in the presence of polymyxins. The assay kit can be used for measurement of polymyxin concentrations in drug discovery, drug development and pharmaceutical samples.



The MicroGram Polymyxin Assay Kit (Catalog number MPX200) includes 6 ml of Reagent MPX1 and 6 ml of Reagent MPX2. It is for 200 assays using 96-well plates. Cuvettes may also be used for the assay.

ASSAY PROTOCOL

STANDARD CURVE

- Sample preparation:** Prepare 150 μ l of polymyxin solutions in the wells of a black 96-well plate with a two-fold serial dilution from 0.2 mg/ml to zero in 90 % methanol.
 - Detection:** Mix 30 μ l of Reagent MPX1 with 150 μ l of the polymyxin solutions for 3 min then add 30 μ l of Reagent MPX2 and mix the solution for 15 min. Read the fluorescence at 535 nm (excitation at 485 nm).
-



ProFoldin

10 Technology Drive, Suite 40, Number 188

Hudson, MA 01749-2791 USA

Phone: (508) 735-2539

FAX: (508) 845-9258

www.profoldin.com

info@profoldin.com

INSTRUCTIONS

3. **Data Analysis:** Plot the fluorescence intensity **F_c** and the polymyxin concentration [**Polymyxin**] to generate the linear standard curve.

$$\mathbf{F_c} = \mathbf{a} [\mathbf{Polymyxin}] + \mathbf{b}$$

Where the **F_c** values are from experimental data, the **a** and **b** values are from the linear fitting between the **F_c** values and the polymyxin concentrations.

UNKNOWN SAMPLES

Follow the same procedure to measure the fluorescence intensity **F_c** values from the unknown samples. Calculate the polymyxin concentrations in the unknown samples using the **F_c** values from the unknown samples and the **a** and **b** values from the standard curve.

$$[\mathbf{Polymyxin}] = (\mathbf{F_c} - \mathbf{b}) / \mathbf{a}$$

RELATED PRODUCTS

CPT200	MicroMolar Cisplatin Assay Kit
OPT200	MicroMolar Oxaliplatin Assay Kit
PST100	Penicillin Drug Stability Test Kit
HIS200	MicroMolar Histidine Assay Kit
CYS200	MicroMolar Cysteine Assay kit
PEP200	Peptide Assay Kit
MAD100K	MicroMolar ADP Assay Kit - 100 assays
MUD100K	MicroMolar UDP assay kit - 100 assays
MCA1000	MicroMolar Copper Assay Kit
NZA1000	NanoMolar Zinc Assay Kit
CMC1000	Detergent Critical Micelle Concentration (CMC) Assay Kit
DAK1000	Detergent assay kit
SDS200	NanoGram SDS Assay Kit
LIP1000	MicroGram Lipid Assay Kit
MPA3000	MicroMolar Phosphate Assay Reagent
PPD1000	MicroMolar Polyphosphate Assay Kit
EDTA200	MicroMolar EDTA Assay kit
CLA100	MicroMolar Chloride Assay Kit
DTT200	MicroMolar DTT Assay kit
PAA100K	MicroMolar Primary Amine Assay Kit

For more concentration assays of various biochemical molecules and inorganic ions, please visit our website at www.profoldin.com.