



**ProFoldin**

10 Technology Drive, Suite 40, Number 188

Hudson, MA 01749-2791 USA

Tel: (508) 735-2539 FAX: (508) 845-9258

[www.profoldin.com](http://www.profoldin.com)

[info@profoldin.com](mailto:info@profoldin.com)

## INSTRUCTIONS

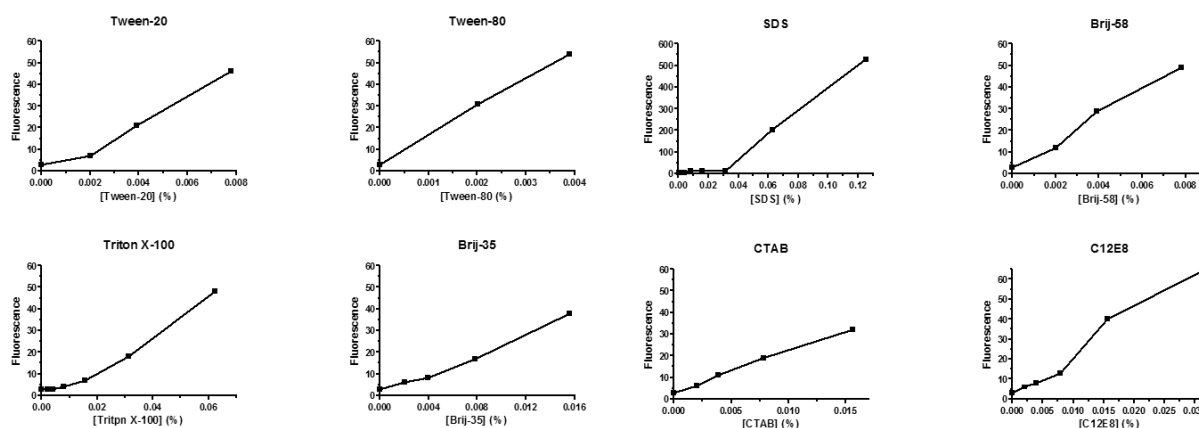
# ProFoldin Detergent Assay Kit

CATALOG NUMBER

DAK1000

## INTRODUCTION

The Detergent Assay Kit is for detection of various detergents at concentrations below their CMC values for most detergents. The concentration response is different from detergent to another. The assay is based on the principle that the detergent interacts with dye A43 and enhances the fluorescence intensity at 535 nm (excitation at 485 nm). The assay is compatible with most buffers and salts. It is not compatible with phosphate. Molecules such as ATP or ADP that release phosphate may interfere with the assay.



The assay kit (Catalog number DAK1000) includes 1 ml of 100 x dye A43, 100 ml of Reagent 1, 0.5 ml of 100 x Reagent 2. It is for measurement of 1000 samples using 96-well plates. A cuvette may also be used for the measurement of detergent concentrations.

The assay is sensitive to dodecyl maltoside but it is not sensitive to alkyl saccharide detergents with short alkyl chains such as octyl glucoside and nonyl glucoside. For octyl glucoside, please use Beta Octyl Glucoside Assay Kit (catalog number: OG100K). For nonyl glucoside, please use Beta Nonyl Glucoside Assay Kit (catalog number: NG100K).

The assay kit is not sensitive to low concentrations of SDS. For SDS, please use NanoGram SDS Assay Kit (catalog number: SDS200).

## ASSAY PROTOCOL

The following protocol is for assays using a standard black 96-well plate (Costar 3915 or Greiner 655076). Adjust the assay reagent volumes proportionally for measurements using cuvettes.



## ProFoldin

10 Technology Drive, Suite 40, Number 188  
Hudson, MA 01749-2791 USA  
Tel: (508) 735-2539 FAX: (508) 845-9258  
[www.profoldin.com](http://www.profoldin.com)  
[info@profoldin.com](mailto:info@profoldin.com)

## INSTRUCTIONS

---

1. Prepare standard detergent solutions with a series of concentrations from 0.001% to 0.1% in water or a buffer. Prepare 1 x dye A43 by dilution of the 100 x dye A43 with Reagent 1 (100-fold dilution). Each assay needs 100  $\mu$ l of 1 x dye A43. Prepare 1 x Reagent 2 by dilution of the 100 x Reagent 2 with water (100 fold dilution). Each assay needs 50  $\mu$ l of 1 x Reagent 2.
2. Mix 50  $\mu$ l of the detergent solution with 100  $\mu$ l of 1 x dye A43. Then add 50  $\mu$ l of 1 x Reagent 2 and mix the solution for 2 min.
3. Read the fluorescence at 535 nm (excitation at 485 nm). Plot the correlation between the fluorescence values and the detergent concentrations and compare the data from the unknown samples.

## RELATED PRODUCTS

OG100K	Beta Octyl Glucoside Assay Kit
NG100K	Beta Nonyl Glucoside Assay Kit
SDS200K	NanoGram SDS Assay Kit
NPA1000	NanoMolar Phosphate Assay Kit
MPA3000	MicoMolar Phosphate Assay Kit
PPD1000	MicroMolar Polyphosphate Assay Kit
EPA001	Easy Protein Assay Reagent
HIS200	MicroMolar Histidine Assay Kit
CYS200	MicroMolar Cysteine Assay kit
PEP200	Peptide Assay Kit
PAA100K	MicroMolar Primary Amine Assay Kit
CAK1000	Coenzyme A Assay Kit
EDTA200	MicroMolar EDTA Assay kit
DTT200	MicroMolar DTT Assay kit
CMC1000	Detergent Critical Micelle Concentration (CMC) Assay Kit
LIP1000	MicroGram Lipid Assay Kit
MAD100K	MicroMolar ADP Assay kit
MUD100K	MicroMolar UDP assay kit
MGD100K	MicroMolar GDP assay kit
MCA1000	MicroMolar Copper Assay Kit
NZA1000	NanoMolar Zinc Assay Kit
NMA1000	NanoMolar Nickel / Cobalt Assay Kit
CLA100	MicroMolar Chloride Assay Kit
MSA200	MicroMolar Sulfate Assay Kit
PMX200	MicroGram Polymyxin Assay Kit
CPT200	MicroMolar Cisplatin Assay Kit
OPT200	MicroMolar Oxaliplatin Assay Kit

For more information of concentration assays, please visit [www.profoldin.com](http://www.profoldin.com).