

## Proteospin Inclusion Body Protein Isolation Micro Kit

ProteoSpin™ Inclusion Body Isolation Micro Kitによって組換えタンパク質をinclusion bodyの形で発現させる大腸菌クローンのスクリーニングが促進されます。Kit中には次の3段階のプロセスによるinclusion bodyの迅速で質の高い精製を可能にするために特別に調製された試薬が含まれます。

1. inclusion bodyを固体として回収するための細菌細胞の溶解
2. 精製されたinclusion bodyの可溶化
3. SiCスピンカラムクロマトグラフィーによる組換えタンパク質の精製



スピнкаラム1本につき、1.5 mLの菌培養液から最大で50 µgの酸性または塩基性のタンパク質を分離します。精製したサンプルは、SDS-PAGE解析、リフォールディング実験、質量分析、更なる精製、スケールアップなどの実験に使用可能です。

### Proteospin Inclusion Body Protein Isolation Micro Kitの利点

**早くて簡単な操作！！**

**12サンプルをわずか60分の操作で！**

**高効率！！**

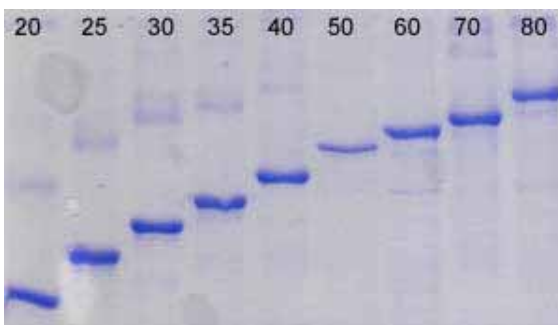
**1.5 mlの細菌培養液から2 - 50 µgのタンパク質が得られます**

**3 kit in One !!**

**酸性および塩基性のタンパク質用に3つのkitが含まれます**

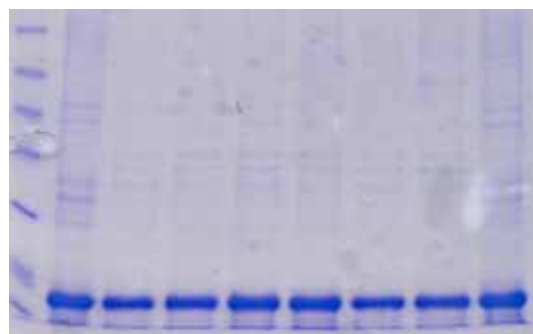
**様々なアプリケーション**

**Mass Spectrometry / SDS-PAGE / Refolding Experiments などに使用できます**



**Figure 1: Efficient Isolation of Inclusion Body Proteins Using ProteoSpin Inclusion Body Isolation Kit.**

Following gene expression, inclusion bodies were extracted, solubilized and proteins were purified. Recovered proteins were analyzed on 12% SDS-PAGE and stained with Coomassie Brilliant Blue R-250. Numbers represent kDa sizes of protein bands.



**Figure 2: Isolation of Recombinant RNaseA Protein using ProteoSpin Inclusion Body Protein Isolation Kit.**

Bacterial clones expressing recombinant RNaseA protein were induced and resulting inclusion body proteins were purified using the Inclusion Body Protein Isolation Kit and analyzed on 12% SDS-PAGE.

## ProteoSpin Inclusion Body Protein Isolation Micro Kit

### Technical Note Abstract

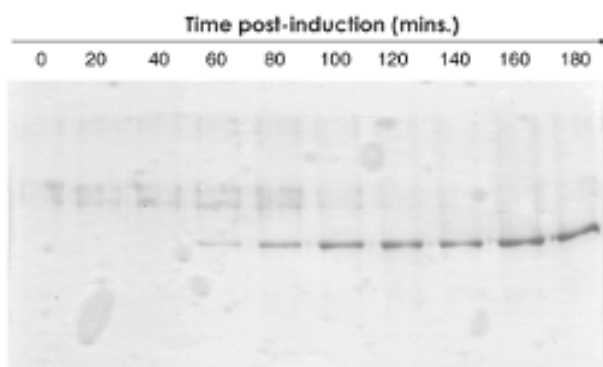
A simple time course experiment was carried out to determine the minimum incubation time after induction needed to attain maximum expression levels using the ProteoSpin™ Inclusion Body Isolation Kit.

A stock culture of an *E. coli* expressor for a 40 kDa protein was streaked on a selection of agar plates containing antibiotics and incubated. One colony was picked and inoculated in a test tube with Luria and antibiotics. After incubation, the solution was centrifuged and the pellet resuspended in fresh solution and incubated until an OD600 of 0.6 was reached. IPTG was added to induce protein expression.

Aliquots were removed at 3 hours following induction and then every 20 minutes.

The solution was centrifuged, cell lysis reagent was added to the cell pellets, and inclusion body isolation was performed. Once the final inclusion body pellets were obtained, solubilization reagent was added to each tube. The inclusion body solution was run through pre-activated ProteoSpin™ columns using the acidic protocol. The flowthrough was discarded and the proteins were eluted twice using elution buffer.

The purified protein samples were run on a 12.5% polyacrylamide gel. The full-length recombinant protein started to appear between 40 and 60 minutes post induction, and continued to increase until a maximum level was reached after 160 minutes. Thus, a minimum incubation time of 3 hours after induction will produce a substantial amount of protein.



**Figure 1:** Time course study for expression of a 40 kDa protein. Expression was induced with 0.4 mM IPTG and incubated at 37 ° C for three hours. Aliquots were removed at indicated intervals and purified. Proteins made visible by Coomassie Blue staining.

Cat No.	品名	容量	定価
NOR10300	ProteoSpin Inclusion Body Isolation Micro Kit	20回	61,000円
NOR10600	ProteoSpin Inclusion Body Isolation Micro Kit	50回	93,000円

#### 保存条件

Cell Lysis ReagentとIB Solubilization Reagentはkitの受領後は4 Cで保存してください。その他の未開封の溶液は室温で保存してください。開封した後は使用しないときは4 Cで保存してください。

ただしBasicおよびAcidic Binding Bufferは開封後も室温で保存してください。