

# EZLys™ Yeast Protein Extraction Reagent

(Store at 4°C)

rev. 06/13

**Cat. No.****8003-100****EZLys™ Yeast Protein Extraction Reagent**, 100 ml, sufficient to extract protein from ~ 20-40 g of wet cell pellet**8003-500****EZLys™ Yeast Protein Extraction Reagent**, 500 ml, sufficient to extract protein from ~ 100-200 g of wet cell pellet**I. Introduction:**

Yeast protein extraction and purification has traditionally been difficult and time consuming because yeast cells contain a very complex cell wall, which is difficult to lyse. BioVision's EZLys™ Yeast Protein Extraction reagent provides a simple and convenient method for highly efficient protein extraction from yeast strains. This Yeast Protein Extraction reagent eliminates the difficulties associated with traditional glass beads method and has been tested for use with different yeast strains like *Pichia pastoris* and *Saccharomyces cerevisiae*.

**II. Applications:**

- Protein purification, affinity based purification
- SDS PAGE, Western Blotting etc.
- Immunoprecipitation
- Reporter assays

**III. Sample Type:**

Yeast cell culture.

**IV. Contents:**

Yeast Protein Extraction Reagent

**V. Storage and Handling:**

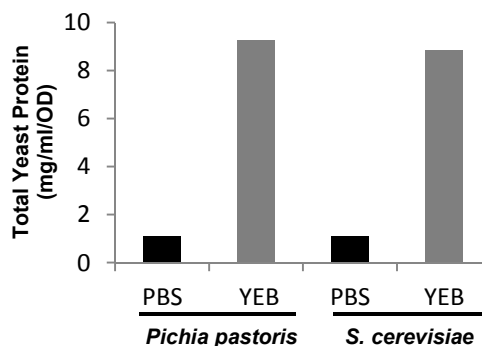
Store kit at 4°C, protected from light. Read the entire protocol before performing the assay.

**VI. User Supplied Reagent:**

Protease inhibitor cocktail (Cat # K272)

**VII. Yeast Protein Extraction Protocol:**

1. Grow yeast cells in appropriate media and conditions. Pellet down cells by centrifugation at 3,000 g for 5 minutes at RT.
2. Resuspend the cells in Yeast Protein Extraction Buffer (Add ~ 1 ml per OD of yeast culture). Incubate the yeast cell suspension for 20 min. at 30°C in gentle shaking incubator.  
Note: In order to avoid protein degradation, we recommend that you add protease inhibitor cocktail (Cat. # K272).
3. Vortex the tubes for 30 sec., followed by centrifugation at 12,000 g at 4°C for 15 min.
4. Collect the supernatant to a clean tube. Determine the protein concentration using Bradford & continue with downstream applications. For future use, aliquot the Yeast Protein Extract, snap-freeze in liquid nitrogen and store at -70°C.



**Figure: EZLys™ BioVision Yeast Protein Extraction (YEP) Reagent:** Total yeast protein was extracted from two different strains of Yeast, *Pichia pastoris* and *Saccharomyces cerevisiae*, using PBS or BioVision's EZLys™ Yeast Protein Extraction reagent according to the protocol. Bradford assay was performed to quantitate the total yeast protein. Results are normalized for the yeast culture OD (600 nm).

**VIII. RELATED PRODUCTS:**

EZLys™ Bacterial Protein Extraction Reagent (8001)

EZLys™ Tissue Protein Extraction Reagent (8002)

Yeast Mitochondria Isolation Kit (K259)

Yeast Mitochondria [*S. Cerevisiae*] (1222)

BCA Protein Quantitation Kit (K812, K813, K814)

Protease &amp; Phosphatase inhibitor cocktails (K283, K284)

EZLys™ Mammalian Protein Extraction Reagent (8004)

Protein Quantitation kit (K810)

Yeast Mitochondria [*Pichia Pastoris*] (1111)

Western Blot Substrate Kit (K820)

Protein Carbonyl Content Assay Kit (K830)

Protease inhibitor cocktails (K271, K272, K277, K278, K279)

**FOR RESEARCH USE ONLY! Not to be used on humans**