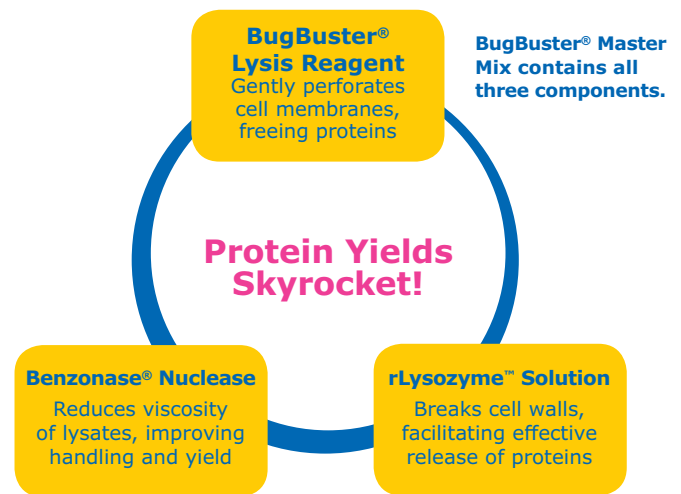


BugBuster® Master Mix

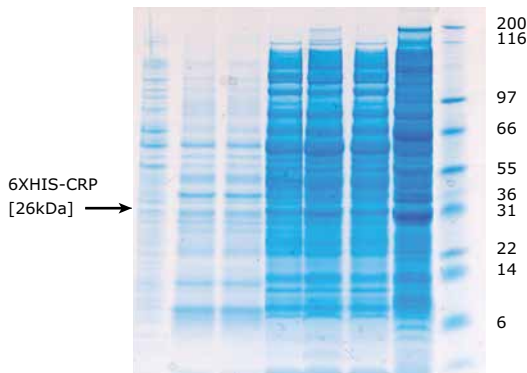
All-in-one formula for protein extraction

BugBuster® Master Mix combines BugBuster® Protein Extraction Reagent with Benzonase® Nuclease and rLysozyme™ Solution in one convenient reagent.

- Efficient lysis of Gram-positive and Gram-negative bacteria
- Maximum recovery of active, soluble protein
- Capable of cell wall perforation without denaturing soluble protein
- Useful for the preparation of high purity inclusion bodies
- Compatible with Protease and Phosphatase Inhibitor Cocktail

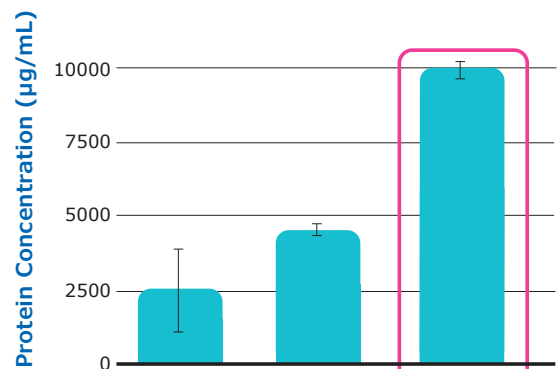


rLysozyme™ Solution	-	-	-	-	+	+	
Benzonase® nuclease	-	+	-	+	-	+	
	NI	HB	HB	BB	BB	BB	M



A.

NI = non-induced BB = BugBuster® reagent
HB = Homebrew buffer M = MW Markers



B.

Lysis Method Homebrew BugBuster® reagent BugBuster® Master Mix

BugBuster® reagent is superior to “homebrew” lysis buffer and BugBuster® reagent with both Benzonase® nuclease and rLysozyme™ solution produced lysates with the highest 6XHIS-CRP yields.

(A) E. coli lysates (5 µL of 1 mL total lysate) from various lysis protocols were fractionated and analyzed by SDS-PAGE. A band

corresponding to 6XHIS-CRP is prominently visualized in the BB +/- lane. (B) Cleared cell lysates (2 µL of 1 mL total) were spotted on assay cards and quantified using the Direct Detect® spectrometer. In each case, bars represent the average of 3 independent samples.



How do I choose between BugBuster® Products?

Components of Bacterial Lysis Reagents

	BugBuster® Reagent	Buffer	Benzonase® Nuclease	rLysozyme™ Solution	Notes
BugBuster® Master Mix	■	■	■	■	1 convenient reagent
BugBuster® Reagent	■	■			
BugBuster® 10X reagent	■				Flexibility to customize dilution and buffer composition
BugBuster® Plus Benzonase® Nuclease	■	■	■		2 separate vials for greater flexibility
BugBuster® Plus Lysonase™ Kit	■	■	■	■	2 separate vials for greater flexibility
PopCulture® Reagent	■	■			Buffer protects protein from the pH extremes produced in high-density culture media, enabling extraction directly in medium.

Description	Fisher Scientific Cat. No.
BugBuster® Master Mix	71-456-4
BugBuster® Protein Extraction Reagent	70-584-1000ML
BugBuster® Plus Benzonase® Nuclease	70-750-3
BugBuster® Plus Lysonase™ Kit	71-370-3
BugBuster® 10X Protein Extraction Reagent	70-921-3
PopCulture® Reagent	71-092-3

Description	Fisher Scientific Cat. No.
Benzonase® Nuclease, Purity > 90%	70-746-4
Benzonase® Nuclease HC, Purity > 90%	71-205-3
Benzonase® Nuclease, Purity > 99%	70-664-3
Benzonase® Nuclease HC, Purity > 99%	71-206-3
rLysozyme™ Solution	71-110-3

We offer a family of protein extraction reagents for gentle, efficient, non-mechanical extraction of soluble proteins from bacteria, yeast, plant, mammalian, and insect cells.

CytoBuster™ reagent — Obtain protein extracts from mammalian and insect cells in their native state, in 5 minutes.

NucBuster™ reagent — Extract nuclear proteins in less than 30 minutes with a simple 2-step protocol.

PhosphoSafe™ Extraction reagent — The PhosphoSafe™ Extraction Buffer is a detergent and phosphatase inhibitor mixture optimized for fast, efficient extraction of soluble proteins from mammalian and insect cells that preserves the phosphorylation state of sample proteins.

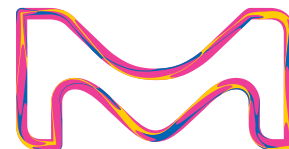
YeastBuster™ reagent — Extract proteins from yeast and plants without mechanical disruption or enzymatic lysis. The reagent has been tested with *Saccharomyces cerevisiae*, *Pichia pastoris*, *P. stipidis*, and *Schizosaccharomyces pombe* strains, and with plant cells.

Insect PopCulture® reagent — Insect PopCulture® Reagent is a detergent-based lysis reagent specifically formulated for extraction from total insect cell culture (in suspension or adherent) without the need for centrifugation.

www.fishersci.com/milliporesigma

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