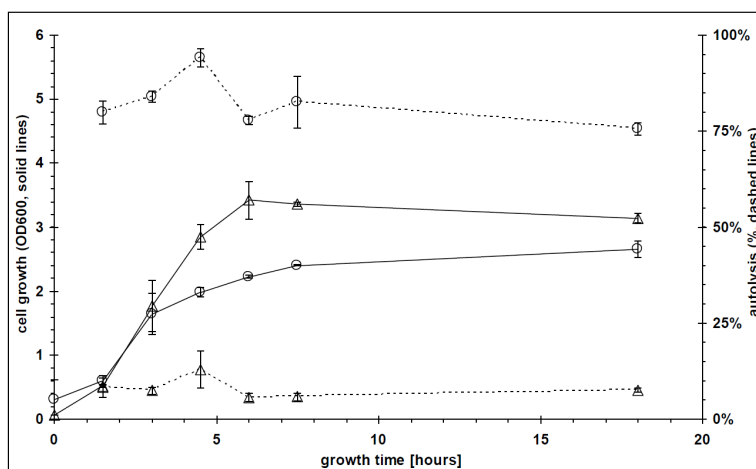


# Quick and Complete Lysis for Protein & DNA Analysis

## XJ Autolysis™ *E. coli* Strains

- **Fast Lysis:** 80 – 90% of *E. coli* are lysed after only one freeze-thaw cycle.
- **Simple 20 Second Transformation:** No heat shock! Just add DNA and spread using *Mix & Go!*™ Competent Cell technology.
- **High Transformation Efficiencies:** Achieve  $10^8$  –  $10^9$  transformants per  $\mu\text{g}$  of plasmid DNA.

≥ 80% Cells Lysed after One Freeze-Thaw Cycle



Autolysis of *E. coli* XJa strain grown in LB media supplemented with 3 mM arabinose. The chart shows the growth (open circle, solid line) and extent of autolysis (open circle, dashed line) of the autolysing strain XJa and growth (open triangle, solid line) and autolysis (open triangle, dashed line) of the control *E. coli* strain JM109. The autolysing activity is defined as the amount of cell protein released after one freeze-thaw cycle compared to the total protein in that sample (amount of protein released following sonication).

Product	Cat. No.	Size
XJa Autolysis™	T5021	1 glycerol stock, 1 ml 500X L-Arabinose
	T3021	10 x 100 $\mu\text{l}$ <i>Mix &amp; Go!</i> ™ Competent Cells, 1 ml 500X L-Arabinose
XJa (DE3) Autolysis™	T5031	1 glycerol stock, 1 ml 500X L-Arabinose
	T3031	10 x 100 $\mu\text{l}$ <i>Mix &amp; Go!</i> ™ Competent Cells, 1 ml 500X L-Arabinose
XJb Autolysis™	T5041	1 glycerol stock, 1 ml 500X L-Arabinose
	T3041	10 x 100 $\mu\text{l}$ <i>Mix &amp; Go!</i> ™ Competent Cells, 1 ml 500X L-Arabinose
XJb (DE3) Autolysis™	T5051	1 glycerol stock, 1 ml 500X L-Arabinose
	T3051	10 x 100 $\mu\text{l}$ <i>Mix &amp; Go!</i> ™ Competent Cells, 1 ml 500X L-Arabinose



# Product Guide: XJ Autolysis™ *E. coli* Strains

	XJa Autolysis™	XJa (DE3) Autolysis™	XJb Autolysis™	XJb (DE3) Autolysis™
<b>Specifications</b>				
Strain Background	K-12	K-12	B	B
General Cloning	✓	✓		
Plasmid Isolation	✓	✓		
General Screening	✓	✓		
Recombinant Protein Expression	✓	✓	✓	✓
Production of ssDNA (F'episome)	✓	✓		
T7 Promoter Transcription (λDE3)		✓		✓
Autolysis (ΔaraB::λR)	Autolysis inducible by Arabinose	Autolysis Inducible by Arabinose	Autolysis Inducible by Arabinose	Autolysis Inducible by Arabinose
Suppression of Amber Mutations (glnV44 or supE44)	✓	✓		
Blue-White Selection (lacZΔM15)	✓	✓		
High-quality and Yield of Plasmid Miniprep DNA (endA1)	✓	✓		
Reduced recombination & Insert Stability (recA1 or recA13)	✓	✓		
Plasmid Size	Up to 10 kb	Up to 10 kb	Up to 10 kb	Up to 10 kb
Transformation of Large Plasmids (deoR)				
Ampicillin Resistant (bla or ampR)				
Chloramphenicol Resistant (cat or CmR or CamR)	✓	✓	✓	✓
Tetracycline Resistant (Tn10 or tetR)				
Kanamycin Resistant (KanR)				
Nalidixic Acid Resistant (gyrA96 or NalR)				
Streptomycin Resistant (StrR)				
Genotype	F[traD36 proA+B+ lacIq Δ(lacZ)M15] Δ(lac-proAB) glnV44 (supE44) e14- (McrA-) thi gyrA96 (NalR) endA1 hsdR17(rK- mK+) relA1 recA1 ΔaraB::λR, cat (CmR)	F[traD36 proA+B+ lacIq Δ(lacZ)M15] Δ(lac-proAB) glnV44 (supE44)e14- (McrA-) thi gyrA96 (NalR) endA1 hsdR17(rK- mK+) relA1 recA1 ΔaraB::λR, cat (CmR), λ(DE3)	F- ompT hsdSB(rB- mB-) gal dcm ΔaraB::λR, cat (CmR)	F- ompT hsdSB(rB- mB-) gal dcm ΔaraB::λR, cat (CmR), λ(DE3)
Catalog Number	T3021/T5021	T3031/T5031	T3041/T5041	T3051/T5051

