

E. coli Expression

The *E. coli* expression system is widely utilized in protein production due to its simplicity, cost-effectiveness, and scalability. Proteos leverages their extensive experience and knowledge to optimize this system for maximum protein yield and quality.

Services:

- Protein expression optimization: 50 mL culture volume
- Pilot scale protein production and yield determination: 2 to 4 L culture volume
- Scale-up protein production: 6 to 40 L culture volume

Scalability:

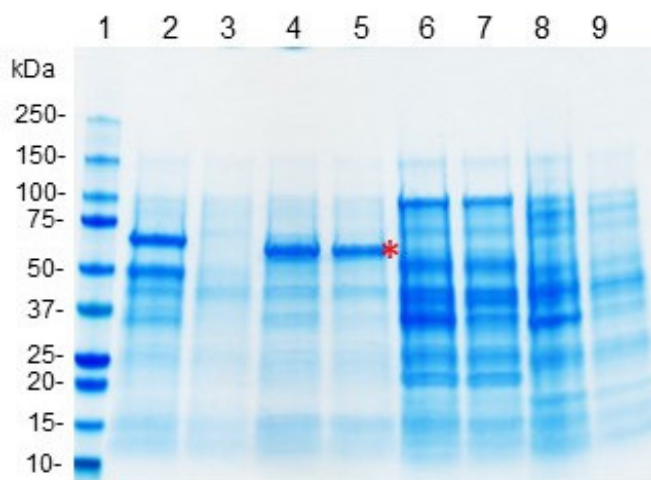
Proteos employs shake flask culture format from optimization to scale-up resulting in reliable scalability and reproducibility.

Expression optimization:

Careful selection of the appropriate host strains, induction conditions, and growth media is used to achieve high levels of recombinant protein expression.

E. coli strain expression screen: target protein MW 68.8 kDa:

Expression analysis: 4-20% reducing SDS-PAGE, Instant Blue gel stain.



1. M.W. Markers
2. Strain #1, total lysate
3. Strain #1, soluble lysate
4. Strain #2, total lysate
5. Strain #2, soluble lysate
6. Strain #3, total lysate
7. Strain #3, soluble lysate
8. Strain #4, total lysate
9. Strain #4, soluble lysate

GETTING STARTED

Construct design, plasmid DNA isolation, sequence verification

EXPRESSION OPTIMIZATION

50 mL shake flask culture, multiple protein targets in parallel, optimization of expression conditions

PILOT SCALE

2 - 4 L shake flask culture, ideal for process verification

PRODUCTION SCALE

6 - 40 L shake flask culture