

## Bacterial Protein Expression

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Upon receipt of your order, Open Biosystems will initiate the submitted protein expression and purification project using a plasmid obtained from Open Biosystems' clone collection or by the customer. Each of the indicated clones will be taken and subcloned into a PET vector to express the desired protein in bacteria. Two liters of culture will be grown using our optimized protocols for e.coli. The overall success rate is roughly 70% with average yield of 2mg. Target purity is >80%, and protein can be purified using the customer's tag of interest. His is the default tag. Payments are due by the milestone reached.

### Project Breakdown and Milestone Pricing (Per Gene/Protein)

Service	Description	Price
Cloning into bacterial expression vector	Amplification of the gene of interest out of a customer-supplied vector and subcloning it into a PET bacterial expression vector.  Verification of the authenticity of the subcloned gene by restriction enzyme digest and sequencing.  Maxi-prep of the recombinant vector DNA.	Quote
Generation and identification of bacterial colonies expressing target proteins	Transformation of recombinant constructs into high-efficiency expression bacterial strain.  Mini-induction to over-express the target protein.  Test for the expression of the recombinant protein by western blot with anti-tag antibody (customer must provide appropriate antibodies) if desired.	Quote
Large-Scale Culture	Two liters of bacterial culture will be induced with IPTG and harvested for protein purification.	Quote
Purification	Protein purification using Ni-NTA (for 6xHIS-tagged proteins) or glutathione (for GST-tagged proteins) beads at either native or denatured conditions.	Quote
<b>Total Cost per Protein</b>		<b>Quote</b>

Total production time is approximately 6 weeks. More protein may be produced above the standard amount for an additional charge. The following will be delivered:

- 1) Roughly 2-5mg of purified protein\*
- 2) PET expression vector
- 3) Western blot data showing positive epitope-tag detection and coomassie-stained gel image

*\*if the protein is produced for antibody production, only the amount remaining after the antibody project is complete will be sent to the customer*