

# Protein Solubility Breakthrough

## SOS Protein Solubility Optimization Service

When expressing recombinant proteins in *E. coli*, the frequent and daunting challenge of protein insolubility has left innumerable scientists frustrated with few feasible alternatives. Help has finally arrived with the new Solubility Optimization Service (SOS) from Genlantis. Using a portfolio of newly developed protein expression technologies, Genlantis guarantees delivery of recombinant protein in a soluble format or there will be no charge.

### Breakthrough Protein Expression Technology

The SOS technology utilizes 24 unique solubility optimization parameters applied to each expression clone. These parameters involve a combination of unique additives and expression conditions, which enhance the ability of exogenous proteins to remain soluble *in vivo* and hence minimize aggregation and inclusion bodies formation. This technology results in soluble expression even with clones that were previously completely insoluble. As a result, the SOS service allows investigators to avoid the expensive and time-consuming guesswork required to optimize conditions for maximum protein solubility and yield.

### A Unique Approach

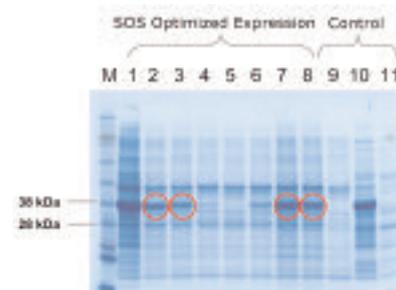
Unlike other bacterial protein expression and solubility services, which utilize unreliable harsh

detergents for post-expression refolding in order to obtain soluble proteins, SOS focuses on expressing your proteins in a soluble format *in vivo*; this greatly increases the chance that your proteins will be functional since they expressed in a soluble format to begin with.

### How SOS Works

Taking advantage of the SOS screening is simple and straightforward. Just complete an SOS Clone Submission Form and email or fax to Genlantis together with your order for the desired quantity of your protein. All information you provide is kept strictly confidential. Upon review, an SOS Project Manager will contact you with an Order Reference Number and instructions for shipping your clone(s) to Genlantis. All coding sequences should contain an N- or C-terminal His tag for purification and be cloned into a T7 or arabinose cassette for expression in Genlantis' optimized *E. coli* strains. Upon receipt of your clone, Genlantis will perform an SOS screening using our 24 solubility optimization conditions. This normally takes approximately two weeks. Your SOS project manager will keep you updated at each step. Once our scientists have identified an optimal

**Figure 1. SOS Optimization Results For Ni-NTA purified Protein B**



expression condition, your protein will be expressed, purified, and shipped to you in the quantity ordered.

### The Risk-Free Protein Solubility Solution

A major benefit of SOS is that you will not be charged if Genlantis scientists are unable to generate your protein in a soluble format in the quantity ordered. That means SOS can be used to evaluate any protein for soluble expression at no risk. So, you have no reason not to take advantage of the SOS service guarantee.

### Powerful Results on Your Most Insoluble Clones

Now, there is no need to remain frustrated due to hours of time spent trying to obtain insoluble proteins and inclusion bodies. Start using SOS service and call Genlantis to obtain your proteins in a soluble format today.

### SOS Protein Solubility Optimization Service

Amount of Purified Soluble Protein	Cat. No.	Price
100 µg	CS102001	\$3,000
500 µg	CS102005	\$5,000
1.0 mg	CS102010	\$6,000