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Novel solubility fusion partners high throughput system to produce soluble proteins

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A large fraction of heterologous proteins are insoluble or poorly expressed in *Escherichia coli*. One solution to this problem is to fuse a "solubility tag" to the target protein. Selection of the best tag is a time consuming trial-and-error process that requires testing multiple different promoters, strains and cloning technologies. Lucigen has developed a simple solution to simultaneously test multiple tags within the context of a single promoter, vector and host system. Lucigen's Solubility Panel consists of multiple cleavable fusion partners within a robust enzyme-free cloning platform. In addition, a novel yellow fluorescent protein significantly enhances solubility and expression while providing an instant visual report of the amount of soluble, active protein. This system permits rapid, simultaneous screening of multiple factors demonstrated to improve solubility and or expression in a high throughput format.

Biography

David Mead leads research and development efforts for the Company's research use only products. He earned his PhD in Physiology and Biophysics at the University of Illinois–Champaign/Urbana. He is the Inventor of TA cloning and he is the co-author of forty four publications.

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