

pAX-Vector System

for fast Fusion Protein Cloning



Cloning fused genes has outstanding advantages - stable promoter activity and simple protein purification. The gene of interest is cloned into the multi cloning site (MCS). After expression, the leader domain (B-gal) of the fusion product is bound to an APTG-column. After elution, the cloned protein is cut off B-gal by endoproteinase Xa and then repurified via the same APTGcolumn.

Advantages:

- authentic proteins
- fast 2 step protein purification
- accessible Xa site due to collagen fragment
- all three different reading frames
- DNA single strand production for sequencing
- complete system with handbook and description

We offer the DNA vectors, sequencing primers, endoproteinase Xa, APTGcolumns, and a handbook with detailed protocols.

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nents of directed mutation will read our article with an open mind and not fall back on the unhelpful charge that those who disagree with their conclusions must be blindly committed to defending orthodoxy.

Richard E. Lenski Center for Microbial Ecology, Michigan State University, East Lansing, MI 48824 John E. Mittler Department of Biology, Emory University, Atlanta, GA 30322

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Editor's note: Additional comments on the

article by Lenski and Mittler will appear in a forthcoming issue.

Liver Stem Cells

It is gratifying to discover that a concept that one has been espousing for a number of years (1) has finally received widespread acceptance (John Travis, Research News, 26 Mar., p. 1829). My collaborators and I began working on models of experimental chemical hepatocarcinogenesis in the early 1970s. Although I had learned the experimental systems at the University of Pittsburgh from Emmanuel Farber, our observations of the cellular changes in the liver preceding the appearance of cancers led us to a conclusion different from Farber's—that liver cancers arise from liver stem cells.

At first, this idea met with considerable skepticism, but by the mid-1980s others began to report similar results and gradually the concept of a liver stem cell gained respectability. It is fulfilling to find so many others who are taking the idea of a liver stem cell seriously.

Stewart Sell

Department of Pathology and Laboratory Medicine, University of Texas Health Science Center, Houston, TX 77225

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