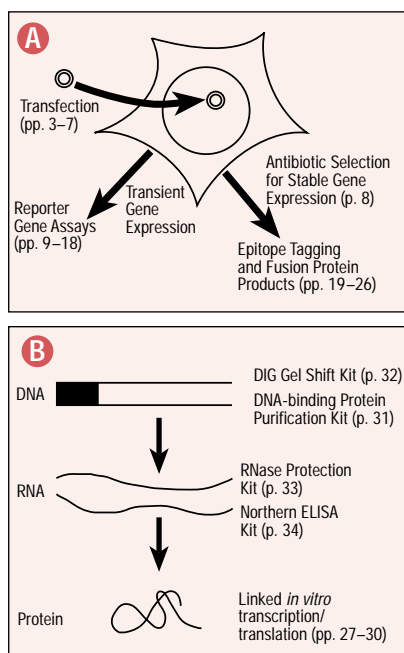


# Gene Expression



**Figure 1.** Overview of Roche Molecular Biochemicals' Gene Expression product line.

While the development of basic tools for DNA cloning during the 1980's and the genome sequencing initiatives of the 1990's have answered many life science questions, the questions of "What do genes do?" and "How are genes and their encoded proteins regulated?" remain largely unanswered. Such questions about the nature of gene expression are now the focus of a tremendous amount of biological research.

Just as Roche Molecular Biochemicals has supplied the finest quality biochemicals to address the life science research areas of the 1980s and early 1990s, we have recently targeted

our Research and Development resources on providing the tools you need to analyze gene expression. The result is a diverse line of the highest quality products for gene expression research (Figure 1, Panels A, B):

- **Transfection Reagents**  
Transfect eukaryotic cells with our new FuGENE 6 Transfection Reagent or our benchmark cationic liposomal reagents, DOSPER and DOTAP (pages 3–7).
- **Selection Antibiotics**  
Select stably transfected cells with Hygromycin B or Geneticin antibiotics (page 8).
- **Reporter Gene Assay Kits and Reagents**  
Measure activity of gene-regulating elements with kits and reagents for detecting  $\beta$ -Gal, CAT, Luciferase, SEAP, or hGH reporter gene expression (pages 9–18).
- **Epitope Tagging Products**  
Rapidly characterize and purify tagged proteins using Anti-HA, Anti-Protein C, Anti-VSV-G, Anti-c-myc, and other antibodies to epitope tags (pages 19–24).
- **Fusion Protein Products**  
Clone, express, purify, and cleave fusion proteins with our line of kits and special-grade proteases for fusion protein analysis (pages 25–26).
- **In Vitro Translation Systems**  
Achieve high protein yields with our line of kits for simplified, optimized nonradioactive or radioactive *in vitro* transcription/translation reactions (pages 27–30).
- **Kits for Gene Regulation Study**  
Perform nonradioactive gel-shift assays and RNase Protection assays, or isolate DNA-binding proteins. Quantify mRNA levels in a microtiter plate format with our Northern ELISA kit (pages 31–34).