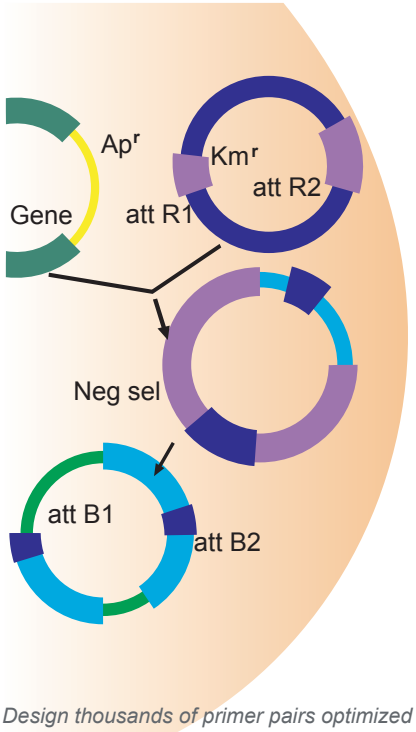
PREMIER Biosoft International

Xpression Primer

A revolutionary tagged primer design tool for designing expression cloning experiments



Design thousands of primer pairs optimized for Gateway®, BD In-Fusion™, TOPO® Tools and epitope systems

Add functionally useful tags for any expression system of your choice and design tagged primers

Automatically maintain the reading frame of the ORF to be amplified when adding tags

View primer secondary structures graphically

Automatic check for in-frame termination

Design sequencing primers for multiple sequences in a single search run

Sequencing primers are designed across amplicons with a user defined interval between forward primers. Reverse primers stagger on the opposing strands

Design primers for in vitro transcription-translation

Primer Tm is calculated using highly accurate SantaLucia nearest neighbor thermodynamic values

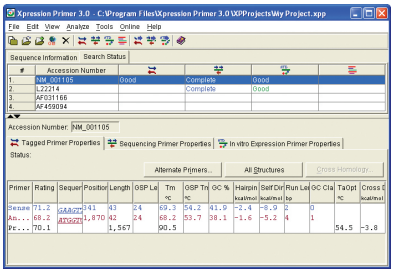
Optimizes all primers in a single search run for uniform PCR cycling conditions

Primers are screened for thermodynamic properties and secondary structures

Retrieve batches of ORF sequences from Entrez using accession or GI numbers

Comprehensive project management for easy and convenient storage and access of data from multiple experiments

Extensive Assay Support for Tagged Primer design



Use the sophisticated algorithm of Xpression Primer to design thousands of tagged primers for expression cloning systems such as Gateway®, BD In-Fusion™, epitope and TOPO® Tools. You can choose to amplify an entire ORF or generate N terminal or C terminal fusion proteins. Xpression Primer ensures that the reading frame of the amplified ORF is conserved. To work with other expression systems, simply add functional tags of your choice and design tagged primers.

Successful Amplification with Nested PCR

To ensure the success of your PCR experiment, let Xpression Primer design nested tagged primers to amplify ORFs. You can locate the outer primers anywhere in the UTRs or in regions of no significant homology. Xpression Primer will BLAST your sequences, automatically interpret the results and design highly specific primers. The tagged inner primer pair amplifies the PCR product generated by the outer pair with little or no non-coding regions. You can also choose from a list of alternate primers to better meet specific experimental needs.

Sequencing for Product Verification Made Easy

The versatile algorithm of Xpression Primer can design optimal sequencing primers for multiple sequences in a single run. It picks forward primers across the amplicon at a specified interval and reverse primers staggered on the opposite strand. You can export the results for several popular well plate configurations.

Generate Precise Transcripts

Design primers to generate sense or antisense transcripts for *in vitro* expression studies.

Web Savvy

Xpression Primer searches Entrez and downloads batches of ORF sequences directly into the program.

Activate the program following these steps:

- Install the Xpression Primer demo from the CD
- Launch the program
- Click **Evaluate** on the first window that opens
- Request an evaluation key from us
- The demo will transform to a fully functional product

Learn to use Xpression Primer

- Xpression Primer Multimedia Tutorial is included on the CD

Order on-line

- www.PremierBiosoft.com
- E-mail: sales@PremierBiosoft.com
- Phone: 650-856-2703, Fax: 650-618-1773

Other bioinformatics tools from Premier Biosoft International

AlleleID Array Designer Beacon Designer Primer Premier SimGlycan SimVector TMA Foresight

PREMIER Biosoft International: Visit us at www.PremierBiosoft.com
3786 Corina Way, Palo Alto, CA 94303-4504 Ph: 650-856-2703, E-mail: support@PremierBiosoft.com, Fax: 650-618-1773