

Cold Fusion Cloning Kit

Revolutionary Cloning System for Rapid, Efficient & Precise Cloning of Any PCR Fragments to Any Expression Vector in One Step

The Cold Fusion technology is a simple, rapid and highly efficient cloning kit. It allows you to directly clone any PCR product(s) to any linearized expression vector, at any site. The PCR fragments can be generated by Taq DNA polymerase or other high fidelity DNA polymerases, with primers that are designed to have at least 15 bases of homology at their linear ends to where you want the product to "fuse". The linearized vector can be generated by PCR or restriction enzymes (single or double cut). One tube simple reaction format, 5 minute incubation at room temperature then 10 minutes on ice, your PCR product(s) rapidly and accurately fuse into the linearized vector in the desired orientation. The kit is so robust that multiple DNA fragments can be assembled simultaneously and cloned into one construct in a single step. The system is highly efficient, with more than 95% positive cloning rate.

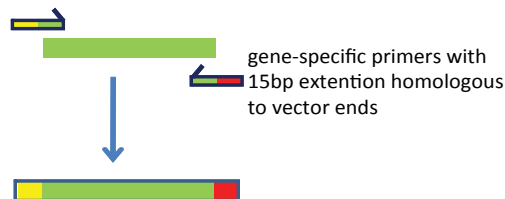
Step 1

Generate a linearized vector



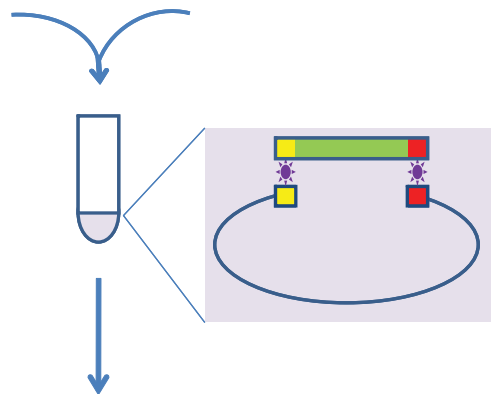
Step 2

Amplify the insert(s) to be cloned by PCR



Step 3

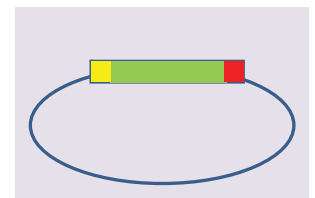
Mix PCR product(s) with linearized vector



Step 4

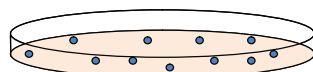
Incubate the reaction

5 min room temperature
10 min on ice



Step 5

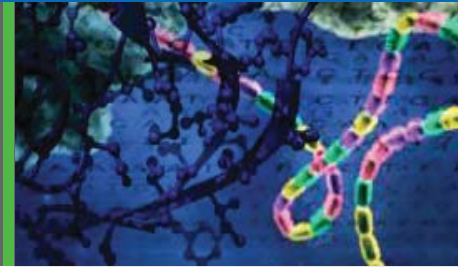
Transformation



Hundreds of colonies (with >95% positive rate)

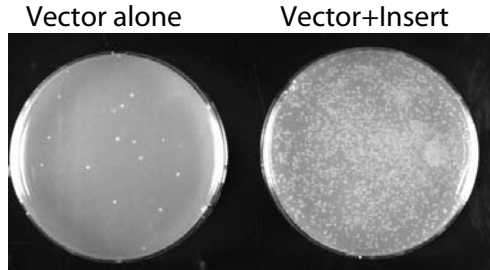
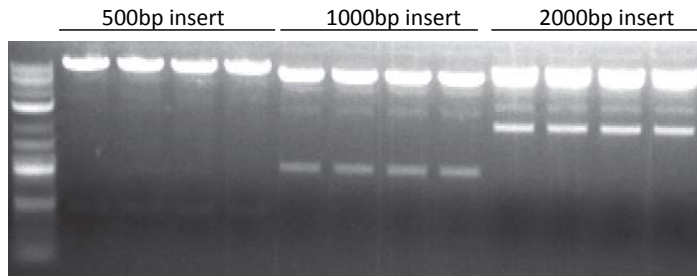
Highlights

- Clone any insert, at any site within any vector
- Restriction enzyme, phosphatase and ligase free system
- Joining multiple fragments at once
- Broad PCR size
- Precise insertion at a desired orientation
- Rapid one reaction for 5 minutes at room temperature
- High Efficiency with > 95% positive clones
- Multiple applications:
 - adding adaptor, linker and tag before or after the insert
 - mutation generation
 - gene synthesis
- High throughput applications

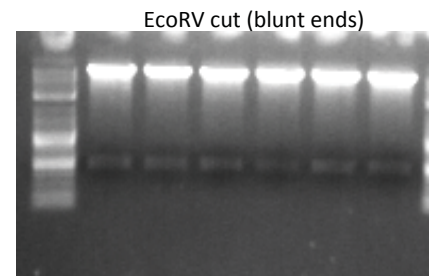
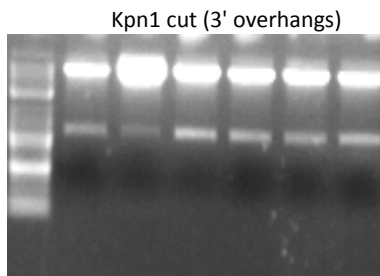
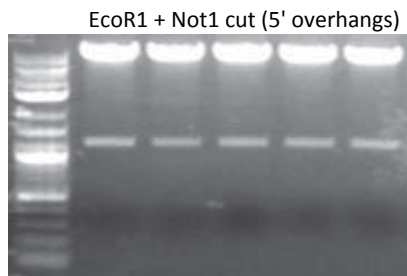


Cold Fusion Cloning Kit

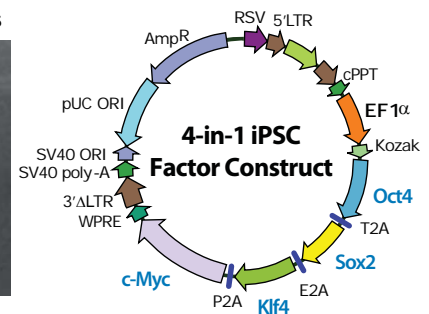
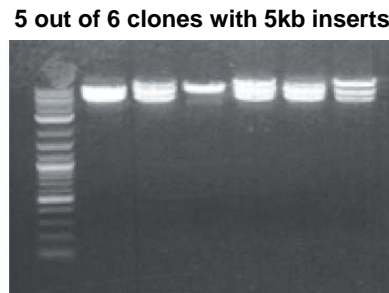
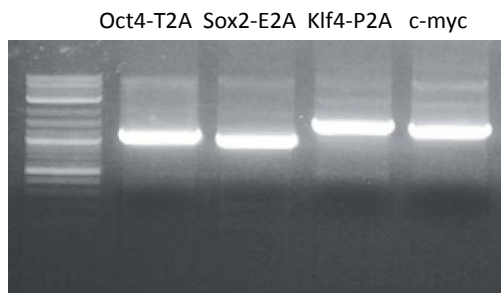
Broad PCR product cloning range with high efficiency



Good for any vector with 5' overhangs, 3' overhangs and blunt ends



Assemble and clone multiple DNA fragments simultaneously into one construct in a single step



Kit components

5x master mixture	20μl
Linearized vector, positive control	3μl
500bp control insert, positive control	3μl
High-efficiency competent cells	10 rxns
User manual	1

*Cold Fusion technology
built a 4-in-1 iPSC
construct in 3 days !*

We Also Offer Custom Services

System Biosciences offers a wide-range of custom services to support your research, allowing you to spend less time making tools, and more time making discoveries. To learn more, visit our website at www.systembio.com/service or call us at 888-266-5066.



System Biosciences, Inc.
1616 North Shoreline Blvd.
Mountain View, CA 94043

Toll Free: 888.266.5066
Fax: 650-968-2277
Email: info@systembio.com
www.systembio.com

© 2009 System Biosciences, Inc. All rights reserved. System Biosciences and the System Biosciences logo are trademarks of System Biosciences, Inc.