

## pKG-cJun(1-79)

**Catalog#** P6050  
**Lot#** 171021

### Materials Provided

1. pKG-cJun (1-79) plasmid: 20µg in 40µl TE (pH7.5), 0.5µg/µl.
2. Product Information Sheet.

### Receiving and Storage:

Upon receiving, spin the vials briefly in a microcentrifuge to collect the contents. Store the products at 2-8°C if used immediately and store at -20°C for extended storage.

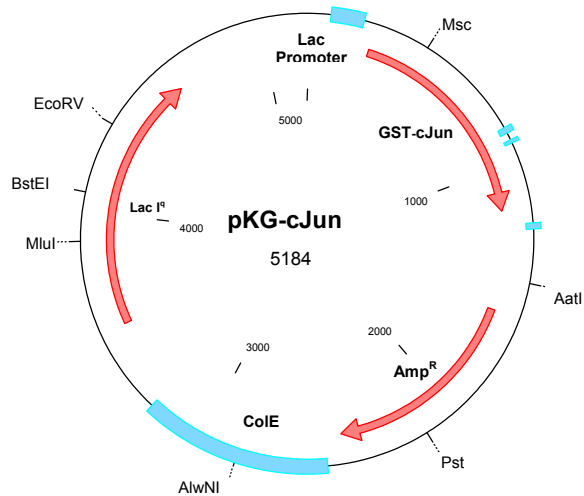
### Prokaryotic selection:

Amp<sup>r</sup> (1592-2572): Ampicillin resistance gene confers Ampicillin resistance in bacteria.

### Other Features:

Name	Start	End
Lac Promoter	88	211
GST-cJun	258	1175
Thrombin Cleavage Site	918	930
Amp <sup>R</sup> (beta-lactamase)	1592	2450
ColE1	2517	3213
Lac I <sup>R</sup>	3533	4613

### Circular Map of pKG-cJun (1-79):



### Sequence of c-Jun (1-79)

(The coding sequence of c-Jun 1-79 is underlined)

```
5' - (921) GTTCGGCGTGGATCC
CAGACTGCAA AGATGGAAC GACCTTCTAT GACGATGCC
TCAACGCCTC GTTCTCCCG TCCGAGAGCG GACCTTATGG
CTACAGTAAC CCCAAGATCC TGAACAGAG CATGACCTG
AACCTGGCCG ACCCAGTGGG GAGCCTGAAG CCGCACCTCC
GCGCCAAGAA CTCGGACCTC CTCACCTCG CCGACGTGGG
GCTGCTCAAG CTGGCGTCG CCGAGCTGGA GCGCCTGTA
GAATTCATCGTGACT (1190) -3'
```

**Application:** pKG-cJun(1-79) expresses a fusion protein consisting of GST and human c-Jun amino acid residues 1-79 upon IPTG induction in an appropriate *E. coli* strain, such as DH5α, BL21, TG1, JM109, XL1-Blue.

**Transformation of *E. coli*:** Use 1µl of the provided plasmid to transform 50-100µl of competent *E. coli* cells such as DH5-α, JM109 or XL1-Blue. Plate the transformants onto a LB Agar plate containing 50-100µg/ml Ampicillin (Biomyx Cat# LA-1100, LA-2100). After overnight incubation in a 37°C incubator, colonies should be visible on the plate.

### Induction of GST-cJun Expression:

1. Pick up a single colony and grow up in 10ml of LB plus 50-100 µg/ml ampicillin liquid medium in a 37°C shaker.
2. Inoculate 1L of LB+50µg/ml of ampicillin in a 2L flask with the 10ml of overnight culture (ONC) in step 1 and grow in the 37°C shaking incubator.
3. When the OD<sub>600</sub> of the culture reaches 0.6, add 0.2 ml of IPTG stock solution (1.0 M) into the flask and continue shaking at 37°C for 4 hr.
4. Harvest the cells by centrifugation at 5000 rpm for 5 min.
5. The cell pellet can be used immediately for purification of GST-cJun protein. Or it can be frozen at a -80°C for later use.

### Related Products

Human GST-cJun, recombinant fusion protein:  
 Cat# J1100S, J1100L

### References:

#### c-Jun:

Angel, P., et al., 1988, *Nature*, 332: 166-171

#### GST fusion Vectors:

Guan KL, Dixon JE. 1991. *Anal Biochem* 192:262-7  
 Smith DB, Johnson KS, 1988. *Gene* 67: 31-40

#### Signal transduction and JNK assay:

Boulikas T., 1995, *Crit. Rev. Eukar. Gene Expr.*, 5: 1-77  
 Derijard B. et al, 1994, *Cell*, 76: 1025-1037  
 Derijard B. et al, 1995, *Science*, 267: 682-685  
 Hibi M., et al., 1993, *Gene Dev*, 7: 2135-2148  
 Lin A. et al, 1995, *Science*, 268: 286-290  
 Kyriakis J. M. et al., 1994, *Nature*, 369: 156-160  
 Minden A. et al, 1994, *Science*, 266: 1719-1722  
 Robbins D. J., et al, 1993 *J. Biol Chem*, 268: 5097-5106  
 Sanchez et al., 1994, *Nature*, 372: 794-798  
 Westwick J. K. et al., 1994, *Proc Natl Acad Sci USA*, 91: 6030-6034  
 Yan M. et al, 1994, *Nature*, 372: 798-800