

hsp70B Inducible Cloning Vector



TECHNICAL SPECIFICATIONS

350 – 4243 Glanford Ave., Victoria, BC Canada V8Z 4B9 Toll free 1.800.661.4978 Fax 250.744.2877 www.stressgen.com/reagents support@stressgen.com

Mammalian *hsp70B* Inducible Cloning Vector pD3SX Product #: SPV-110

Uses

The vector pD3SX can be used for insertion of genes of interest and expression of the genes under the strict heat regulation of the human Hsp70B promoter in mammalian cells such as human HeLa, human Wish, mouse NIH/3T3, CHO, and CV-1 and COS monkey cells as well as in *X. laevis* oocytes. Protocols for the convenient isolation of fragments containing the Hsp70B promoter and RNA leader sequences are provided. Limited restriction map information is available (see below).

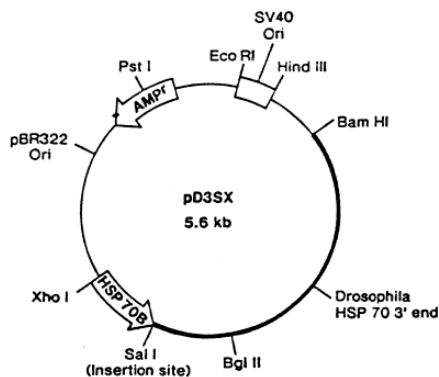
Promoter Isolation Protocol

Digest with Sal I and Xho I. This digest produces two fragments, one large, containing vector sequences, and the other of about 400 bp, containing *hsp70B* promoter and RNA leader sequences. Sal I is at the end of the RNA leader sequence.

Features

1. SV40 and ColE1 origins for replication in *E. coli* and amplification in COS monkey cells.
2. Ampicillin resistance gene for selection in *E. coli*.
3. Human Hsp70B gene fragment containing about 300bp of promoter sequence and most of the Hsp RNA leader region.
4. Immediately downstream from the Hsp70B sequences are 3' nontranslated and nontranscribed sequences from a *D. melanogaster* Hsp70 gene.
5. A unique Sal I site for convenient insertion of Sal I or XhoI fragments, or linked fragments.
6. Absence of pBR322 "poison sequences" that impair amplification in COS monkey cells.

pD3SX Mammalian Expression Vector



References

1. Voellmy, R., Ahmed, A., Schiller, P., Bromley, P. and Rungger, D. (1985) *PNAS USA* **82**:4949-4953.
2. Dahl, G., Miller, T., Paul, D., Voellmy, R. and Werner, R. (1987) *Science* **236**: 1290-1293.
3. Nishimura, R.N., Santos, D., Esmaili, L., Fu, S.T., Dwyer, B.E. (2000) *Cell Stress Chaperones* **5**(3): 173-180.
4. Quinones, H.I., List, A.F., Gerner, E.W. (2002) *Clin Cancer Res* **8**(5): 1295-1300.

Rev: 10/27/03

CERTIFICATE OF ANALYSIS

hsp70B Inducible Cloning Vector

Product #: SPV-110

Size: 25 µg

Lot #: B310436

Format: 25 µg of lyophilized expression vector in TE buffer.

Concentration: 0.75mg/mL

Certified by: K. Levant

QC by: J. Pringle

Date: 10/27/03

Date: 10/22/03

STORAGE & SHIPPING: Store product at -20°C to -70°C. Product may be stored for 2-4 weeks at 4°C. For optimal storage, aliquot to smaller portions and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles. For maximum product recovery, after thawing, centrifuge the product vial before removing cap. Shipped on gel packs.



FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES: This product is not to be used for diagnostic nor therapeutic purposes. By accepting this product, the user confirms that it will be used for research purposes only. Stressgen warrants that its products conform to the information published by Stressgen. Purchaser must determine the suitability of the product for their particular use. Please refer to the MSDS for product safety information.

| Applications | Certified* | Cited |
|--------------------|------------|-------|
| Transfection (3,4) | Yes | Yes |