

***E. coli* B ER2566**



1-800-632-7799  
info@neb.com  
www.neb.com



E4130S 012150320031

**E4130S**

**Lot: 0121503 Store at -20°C**

**Description:** ER2566 (1) is a host strain for expression of the fusion protein from a pTYB vector in the IMPACT™ T7 System (2,3). ER2566 cells carry a chromosomal copy of the T7 RNA polymerase gene inserted into *lac* and under the control of the *lac* promoter. In the absence of IPTG induction, expression of the T7 RNA polymerase is suppressed by the binding of lacI repressor to the *lac* promoter (4,5). The strain is a derivative of BL21, deficient in both *lon* and *ompT* proteases.

**Genotype:** F<sup>-</sup> λ<sup>-</sup> *fhuA2* [*lon*] *ompT lacZ*::*T7 genel gal sulA11 Δ(mcrC-mrr)114::IS10 R(mcr 73: miniTn10)2 R(zgb-210::Tn10)1* (TetS) *endA1 [dcm]*

**Notes:** Storage at -70°C is recommended for periods longer than 30 days. Avoid repeated freeze/thaw cycles.

Additional information such as vector sequences, strain recommendations, and frequently asked questions are available at the NEB web site: [www.neb.com](http://www.neb.com)

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**References:**

- Chong, S., Mersha, F. B., Comb, D. G., Scott, M. E., Landry, D., Vence, L. M., Perler, F. B., Benner, J., Kucera, R. B., Hirvonen, C. A., Pelletier, J. J., Paulus, H., and Xu, M. -Q (1997). Single-column purification of free recombinant proteins using a self-cleavable affinity tag derived from a protein splicing element *Gene* 192, 277–281.
- Chong, S., Shao, Y., Paulus, H., Benner, J., Perler, F.B. and Xu, M.-Q (1996). Protein splicing involving the *Saccharomyces cerevisiae* VMA intein: the steps in the splicing pathway, side reactions leading to protein cleavage, and establishment of an *in vivo* splicing system *J. Biol. Chem.* 271, 22159–22168.
- Jack, W., Dila, D., Menin, J., and Raleigh, E. A., Personal Communication.
- Studier, F. W., Rosenberg, A. H., Dunn, J. J., and Dubendorff, J. W. (1990). Use of T7 RNA Polymerase to direct expression of cloned genes, *Methods Enzymology* 185, 60–89.

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- Chong, S., Mersha, F. B., Comb, D. G., Scott, M. E., Landry, D., Vence, L. M., Perler, F. B., Benner, J., Kucera, R. B., Hirvonen, C. A., Pelletier, J. J., Paulus, H., and Xu, M. -Q (1997). Single-column purification of free recombinant proteins using a self-cleavable affinity tag derived from a protein splicing element *Gene* 192, 277–281.
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- Dubendorff, J. W. and Studier, F. W. (1991). Controlling basal expression in an inducible T7 expression system by blocking the target T7 promoter with *lac* repressor *J. Mol. Biol.* 219, 45–59.

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Commercial Laboratory Buyer and User: Use of the host cells that contain the cloned copy of T7 gene 1, the gene for T7 RNA polymerase for any purpose other than in combination with the IMPACT™ T7 vector is explicitly prohibited.

(See other side)

CERTIFICATE OF ANALYSIS

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