Dharmacon™

RNAi, Gene Expression & Gene Editing

E. coli Keio Knockout™ Parent Strain BW25113

Cat. #OEC5042

Product Description:

The *E. coli* K-12 BW25113 parent strain is the common background genotype used for the generation of the Dharmacon *E. coli* Keio Knockout Collection, which is a set of precisely defined, single-gene deletions of all nonessential genes in *E.coli* K-12. Out of 4288 genes targeted, mutants were obtained for 3985 genes. Two independent mutants were obtained for each deleted gene, yielding a total of 7970 knockout strains (Baba et al, 2006).

Using λ Red recombination, a FRT-flanked kanamycin cassette was utilized to replace each coding region. This cassette may be excised by FLP recombination, leaving an in-frame, translatable sequence that includes the endogenous start, a short recombinational scar sequence, and an 18-nucleotide, C-terminal coding sequence from the endogenous gene. For details concerning cassette excision, please consult (Datsenko and Wanner, 2000).

This collection is a new resource for systematic analyses of unknown gene functions and gene regulatory networks, but also for genome-wide testing of mutational effects in a common strain background.

Genotype of BW25113: rrnB3 ΔlacZ4787 hsdR514 Δ(araBAD)567 Δ(rhaBAD)568 rph-1.

Quality Control:

All cultures are checked for growth prior to shipment.

Shipping and Storage:

The *E. coli* parent strain BW25113 is shipped as bacterial culture in 2x LB broth (low salt)* medium with 8% glycerol. Individual constructs are shipped at room temperature.

*1x LB medium can be used instead of 2x LB broth medium.

GE, imagination at work and GE monogram are trademarks of General Electric Company. Dharmacon is a trademark of GE Healthcare companies. All other trademarks are the property of General Electric Company or one of its subsidiaries. ©2014 General Electric Company—All rights reserved. Version published June 2014. GE Healthcare UK Limited, Amersham Place, Little Chalfont, Buckinghamshire, HP7 9NA, UK

