
LMBP BACTERIAL HOST STRAIN

MC1061(λ)

<u>Species:</u>	<i>Escherichia coli</i>
<u>Group:</u>	K12
<u>Accession number:</u>	LMBP 1061
<u>Deposit date:</u>	01/01/1998
<u>Depositor:</u>	Prof. E. Remaut ^{1,2} ¹ Department for Molecular Biomedical Research, VIB, Ghent, Belgium ² Department of Biomedical Molecular Biology, Ghent University, Ghent, Belgium
<u>Medium:</u>	LB
<u>Selection marker:</u>	/
<u>Cultivation temperature:</u>	28°C (Note: 37°C is also possible but phage λ remains more stably integrated when grown at 28°C)
<u>Original reference:</u>	Mertens et al., Gene 164 (1995), 9-15 [PMID: 7590329]
<u>Related reference:</u>	Casadaban et al., J. Mol. Biol. 138 (1980), 179-207 [PMID: 6997493]
<u>Genotype:</u>	$\Delta(\text{araA-leu})7697 [\text{araD139}]_{B/r} \Delta(\text{codB-lac})3 = \Delta\text{lac74 galK16 galE15 e14}^- \text{mcrA0 relA1 rpsL150 spoT1 mcrB1 hsdR2 } \lambda^+$
<u>Phenotype:</u>	Sm ^R r _K ⁻ m _K ⁺ Zeo ^R
<u>Properties:</u>	Useful host for primary transformation. Transforms very well by the CaCl ₂ method (10 ⁷ /μg). There is no Type I restriction; incoming DNA receives the <i>E. coli</i> K modification. Lysogenized with λ wild type. Recommended as maintenance host for plasmids containing the PL or PR promoter from phage λ . It is recommended to grow MC1061(λ), containing pPL plasmids, at 28°C. As this strain is deleted for the <i>lacI</i> repressor gene, it is not a suitable host for plasmids carrying the <i>lac</i> promoter or derivatives thereof, such as <i>tac</i> , <i>trc</i> , <i>N25/O2</i> ... promoters. In the absence of repression, continuous transcription from the <i>lac</i> promoter is likely to result in plasmid instability. The zeocin resistance is most probably related to the presence of a functional <i>recA</i> gene (<i>recA</i> ⁺) (personal communication John Wertz, director E. coli Genetick Stock Center).
<u>Restricted use:</u>	BCCM MTA

Culture recovery and preservation instructions

The enclosed culture has been grown overnight to saturation, confirming its viability. BCCM/LMBP advises to recover it immediately on receipt before use or storage.

Recovery: subculturing into liquid or solid medium according to the cultivation conditions described above.

Long-term preservation: lyophilisation of the subculture
cryopreservation (at -80 °C at the least)