

These validated data are a snapshot at a given moment; further updates are always possible.

<u>Species:</u>	<i>Escherichia coli</i>
<u>Group:</u>	K12
<u>Strain designation:</u>	MC1061(λ)
<u>Accession number:</u>	LMBP 1061
<u>Deposit date:</u>	01/01/1998
<u>Depositor:</u>	Prof. Dr E. Remaut ^{1 2} ¹ Department for Molecular Biomedical Research, VIB, Ghent, Belgium ² Department of Biomedical Molecular Biology, Ghent University, Ghent, Belgium
<u>Other culture collection numbers:</u>	/
<u>Containment level:</u>	This strain has been assigned the containment level 'Class 1' following the European Directive 2009/41/EC on the contained use of genetically modified organisms, and its updates (see also the Belgian risk group classification).
<u>Medium:</u>	LB-Lennox
<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>	F ⁻ Δ(<i>araA-leu</i>)7697 [<i>araD139</i>] _{B/r} Δ(<i>codB-lacI</i>)3 <i>galK16 galE15</i> (GalS) <i>e14⁻ mcrA0 relA1 rpsL150 spoT1 mcrB1 hsdR2 λ⁺</i>
<u>Phenotype:</u>	Str ^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 recA gene (recA+) (personal communication John Wertz, director E. coli Genetic Stock Center).

Restricted use:

[BCCM MTA](#)

Culture recovery and preservation instructions

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

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

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