BCCM · GeneCorner

Bacterial host strain

Escherichia coli K12 MC1061

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

Species:	*Escherichia coli*
Group:	K12
Strain designation:	MC1061
Accession number:	**LMBP 472**
Deposit date:	01/01/1998
Depositor:	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
Other culture collection numbers:	CGSC 6649
Containment level:	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).
Medium:	LB-Lennox
Selection marker:	/
Cultivation temperature:	37°C
Original reference:	Casadaban et al., J. Mol. Biol. 138 (1980), 179-207 [PMID: 6997493]
Related reference:	Brigé et al., Biochem. J. 394 (2006), 335-344 [PMID: 16293111]
Genotype:	F^- Δ(*araA-leu*)7697 $[araD139]_{B/r}$ Δ(*codB-lacI*)3 *galK*16 *galE*15(GalS) λ^- *e*14$^-$ *mcrA*0 *relA*1 *rpsL*150 *spoT*1 *mcrB*1 *hsdR*2 (Source: CGSC 6649)
Phenotype:	Str^R r_K^- m_K^+ Zeo^R
Properties:	Useful host for primary transformation. Transforms very well by the $CaCl_2$ method ($10^7/\mu g$). There is no Type I restriction; incoming DNA receives the *E. coli* K modification. As this strain is deleted for the *lacI* repressor gene, it is not a suitable host for plasmids carrying the *lac* promoter or derivatives thereof, such as *tac, trc, N25/O2 …* promoters. In the absence of repression, continuous transcription from the *lac* 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)