Bacterial host strain

Escherichia coli K12 MC1061Rif

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

Species: Escherichia coli

Group: K12

Strain designation: MC1061Rif

Accession number: LMBP 3319

Deposit date: 09/12/2004

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Other culture collection numbers: /

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: rifampicin (100 µg/ml)

Cultivation temperature: 37°C

Original reference: /


Genotype: F⁻ Δ(araA-leu)7697 [araD139]B₃Δ(codB-lac)3 galK16 galE15(GalS) λ⁻ e14 mcrA0 relA1 rpsL150 spoT1 mcrB1 hsdR2

Phenotype: RifR StrR rK⁺ mK⁺

Properties: This is a rifampicin resistant MC1061 mutant. Useful host for primary transformation. Transforms very well by the CaCl₂ method (10⁷/µg). 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.

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)