**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 9560

**Deposit date:** 01/01/1998

**Depositor:** Prof. Dr E. Remaut¹ ²

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**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:** streptomycin (25 μg/ml)

**Cultivation temperature:** 37°C


**Genotype:** F⁻ [araD139]Br | Δ(codB-lacI)3 galK16 galE15(GalS) λ e14 mcrA0 relA1 rpsL150 spoT1 mcrB1 hsdR2 (Source: CGSC 6649)

**Phenotype:** StrR rK mK⁺ ZeoR

**Properties:** 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.

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).
Additional information

The streptomycin resistance has been experimentally confirmed by BCCM/GeneCorner.

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)