

## Escherichia coli K12 DH5αF

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

Species: Escherichia coli

Group: K12

Strain designation: DH5 $\alpha$ F

Accession number: LMBP 1596

<u>Deposit date</u>: 01/12/2008

Depositor: Prof. Dr E. Remaut<sup>12</sup>

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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: /

<u>Cultivation temperature</u>: 37°C

Original reference:

Related reference: Woodcock et al., Nucl. Acids Res. 17 (1989), 3469-3478 [PMID:

26576601

Grant et al., Proc. Natl. Acad. Sci. USA 87 (1990), 4645-4649

[PMID: 2162051]

Hanahan, J. Mol. Biol. 166 (1983), 557-580 [PMID: 6345791]

Genotype:  $F^+$   $\Delta(argF-lac)169$   $\varphi 80dlacZ58(M15)$   $\Delta phoA8$  glnX44(AS)  $\lambda^-$ 

deoR481 rfbC1 gyrA96 recA1 endA1 thiE1 hsdR17

Phenotype:  $Nal^R r_K m_K^+$ 

Properties: This is a useful strain for Lac $\alpha$  complementation. The strain does

not contain the lacl<sup>q</sup> gene and therefore repression on the lac promoter, present on high-copy plasmids, is incomplete. Consequently, this strain does not require IPTG to induce expression from the lac promoter even though it expresses the Lac repressor. The copy number of most plasmids exceeds the repressor number in the cells. If there are concerns about obtaining maximal levels of expression, add IPTG to a final

concentration of 1 mM.

This strain contains the F factor of NK3 and therefore can be used

for infection with M13 or fd phages and derivatives.

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)

BCCM/GeneCorner Plasmid Collection Version: 08-JAN-2018