

Species: *Escherichia coli*

Group: K12

Accession number: **LMBP 670**

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Medium: LB

Selection marker: /

Cultivation temperature: 37°C

Original reference: Gottesman et al., J. Bacteriol. 148 (1981), 265-273
[PMID: [7026534](#)]

Related reference: Gottesman et al., J. Bacteriol. 162 (1985), 1111-1119
[PMID: [3888955](#)]

Genotype: *lon-100 Δ(gal-pgl)324 lac thi rpsL*

Phenotype: Lon⁻
non-mucoid
Sm^R

Properties: The Lon protease plays a major role in the proteolytic machinery of *E. coli*. *Lon* mutants are highly pleiotropic and produce mucoid colonies that are difficult to handle. The (*gal-pgl*) deletion eliminates mucoidy and restores normal colony morphology.
Lon mutants may be useful in stabilizing heterologous proteins expressed in *E. coli* (see e.g. Remaut et al., Nucleic Acids Res. 11 (1983), 4677-4688).

Restricted use: BCCM MTA

Culture recovery and preservation instructions

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

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

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