JM109

Features & Applications :

1. JM109 cells carry the F' episome for pili allowing infection by filamentous phage such as M13 and by M13 helper phage for single stranded rescue from phagemid vectors.
2. F' episome also has the lac 1^q repressor gene producing 10 fold more lac repressor than is found in most strains thereby ensuring more stringent repression of toxic proteins.
3. F' episome has the $1^qZ\Delta M15$ mutation which provides the complementation of the β-galactosidase gene allowing blue/white selection assay.
4. Insert stability is ensured due to Rec A^- status. This strain also lacks the *E.coli* K restriction system thus preventing restriction of cloned DNA.
5. End A1 mutation ensures quality and improved yield of plasmid DNA.
6. Allows cloning with cleavage of transformed DNA by endogenous restriction endonucleases. DNA prepared from these strains can be used to transform r_k^+ *E.coli.* strains.

Genotype: end A1, rec A1, gyr A96, thi, hsd R17 (r_k^-, m_k^+), rel A1, supE44, Δ (lac - pro AB), [F', tra D36, proAB, lac I^q Z Δ M15].

Reference: Yanisch - Perron, C., Viera, J. and Messing) (1985) Gene, **33**, 103.

Ordering Information:

Product	Size	Cat #
JM109	1 vial	105336

E.coli GJ1158 (Salt inducible expression strain)

Features and Applications: Genei now provides licence for Indian scientists to use salt inducible strain developed at CCMB.

1. This strain allows expression of genes under the control of the T7 promoter by salt induction.
2. The salt inducible *pro*U promoter controlling the T7 RNA polymerase gene can more closely regulate the expression of gene of interest.
3. The expression in the strain often assures better yield & solubility.
4. Induction achieved by low cost NaCl.

Genotype: *ompT hsdS gal dcm ΔmalAp510 malP::(proUp-T7 RNAP) malQ::lacZhyb11 Δ(zhf-900::Tn10dTet).*

Reference: Poonam Bhandari & J. Gowrishankar, Journal of Bacteriology, July 1997, P.4403 - 4406.

Ordering Information:

Product	Size	Cat #
E.coli GJ1158	1 vial	105337