BCCM · GeneCorner

Bacterial host strain

Escherichia coli B BL21(DE3)

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

Species:	*Escherichia coli*
Group:	B
Strain designation:	BL21(DE3)
Accession number:	**LMBP 1455**
Deposit date:	25/11/2019
Depositor:	Prof. Dr W. Studier[1] [1] Biology Department, Brookhaven National Laboratory, Upton, USA
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:	/
Cultivation temperature:	28°C
Original reference:	Studier and Moffatt, J. Mol. Biol. 189 (1986), 113-130 [PMID: 3537305]
Related reference:	Studier et al., J. Mol. Biol. 394 (2009), 653-680 [PMID: 19765592] Jeong et al., J. Mol. Biol. 394 (2009), 644-652 [PMID: 19786035] Daegelen et al., J. Mol. Biol. 394 (2009), 634-643 [PMID: 19765591]
Genotype:	F^- ompT gal dcm lon hsdSB(rB^- mB^-) λ(DE3 [lacI lacUV5-T7 gene 1 ind1 sam7 nin5])
Phenotype:	/
Properties:	The strain contains DE3, a λ prophage carrying the T7 RNA polymerase gene under control of the lac UV5 promoter and lacIq. IPTG is required to induce expression of the T7 RNA polymerase. Protein expression from transforming plasmids containing a T7 promoter-driven expression system is repressed until IPTG induction of T7 RNA polymerase expression occurs. The strain does not contain the lon protease and is also deficient in the outer membrane protease, OmpT. The lack of two key proteases reduces the degradation of heterologous proteins expressed in the strain.
Additional information	The full genome sequence of this strain is available at the ENA/GenBank nucleotide sequence databases under accession number CP001509.3.

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)