

B834(DE3)感受态细胞

B834(DE3)ChemicallyCompetent Cell 说明书

产品货号: ML-G2066

保存条件: -80℃

产品规格: 10×100μl 50×100μl

产品介绍

基 因 型

F-ompT hsdSB(rB-mB-) galDCM met(DE3)

简 要 说 明

MLBioB834 是 BL21 菌株的父亲菌株。该系列宿主菌是蛋氨酸缺陷型，可以

用来高水平，高特异性 的使用 **35S-蛋氨酸**和**硒代蛋氨酸**标记目的蛋白，进行蛋白质晶体结构研究。**B834** 宿主菌也是 **lon** 和 **ompT** 蛋白酶缺陷型菌株。**DE3** 是溶源性的 λ **DE3**，所以带有 **T7RNA** 聚合酶的染色体拷贝。该菌株适用于 **pET** 系列载体，及其他 **T7** 启动子系列载体。

操作说明

- 1.取 100 μ l 冰上融化的 **B834 (DE3)** 感受态细胞，加入目的质粒并轻轻混匀，冰上静置 25 分钟。
- 2.42 $^{\circ}$ C 水浴热激 45 秒，迅速放回冰上并静置 2 分钟，晃动会降低转化效率。
- 3.向离心管中加入 700 μ l 不含抗生素的无菌培养基（**2YT** 或 **LB**），混匀后 37 $^{\circ}$ C，200rpm 复苏 60 分钟。
- 4.5000rpm 离心一分钟收菌，留取 100 μ l 左右上清轻轻吹打重悬菌块并涂布到含相应抗生素的 **2YT** 或 **LB** 培养基上。
- 5.将平板倒置放于 37 $^{\circ}$ C 培养箱过夜培养。

注意事项

1. **MLBio** 感受态细胞最好在冰上融化。
2. 混入质粒时应轻柔操作。
3. 转化高浓度的质粒可相应减少最终用于涂板的菌量。

4. 诱导时，IPTG 浓度可选（0.1-40mM 均可）。
5. 为获得需要量的蛋白，最佳诱导时间，温度，IPTG 浓度需实验者优化。

Sample Induction Protocol (for reference only)

Inoculate a single colony from a freshly streaked plate into 5 ml of LB medium containing the appropriate antibiotic for the plasmid and host strain. 2. Incubate with shaking at 200 rpm at 37°C overnight. 3. Inoculate 50 ml of LB medium containing the appropriate antibiotic with 0.5 ml of the overnight culture prepared in step 2 (use the 500 ml triangular flask as the container would be better). 4. Incubate with shaking at 150 rpm at 37°C until the OD 600 reaches 0.5-0.8. 5. (Optional) Pipet 1 ml of the cultures into clean microcentrifuge tubes and place the tubes on ice until needed for gel analysis or storage at -20°C. These will serve as the non-induced control samples. 6. Add IPTG to a final concentration of 1 mM. Optimal time for induction of the target protein may vary from 2-16 hours, depending on the protein. 7. Incubate with shaking at 120 rpm at 37°C for 3-4 hours. To determine the optimal time for induction of the target protein, it is recommended that a time course experiment be performed varying the induction from 2-16 hours. 8. Place the culture on ice for 10 minutes. Harvest cells by centrifugation at 5,000 x g for 10 minutes at 4°C. 9. Remove the supernatant and store the cell pellet at -20°C (storage at lower temperatures is also acceptable).

IPTG

Prepare a 1 M solution of IPTG (Isopropyl- β -D-thiogalactoside; Isopropyl- β -D-thiogalactopyranoside) by dissolving 2.38 g of IPTG in dd water and adjust the final volume to 10 ml. Filter sterilize before use.