

Quality controls of productions with APS-One/Mastercalve system

To validate Petri dishes prepared, the Mediaprep service has implemented a series of quality controls. The quality controls consist of:

- 1) Validating the appropriate selection conditions by taking randomly two plates per run and place them for overnight at 37°C (in the incubator located at the CEBGS), one closed and one opened.
- 2) Confirming the presence of the appropriate antibiotic by transforming BL21(DE3) cells with 4 plasmids, each one harboring a specific resistance gene and encoding a specific colored protein, and spread cells, as well as non-transformed cells, on a plate. The plasmids used are:
 - (A) pHGWA-avEYFP for ampicillin resistance and encoding yellow protein
 - (K) pHGWK-DsRed for kanamycin resistance and encoding red protein
 - (C) pCoGWC-avECFP for chloramphenicol resistance and encoding cyan protein
 - (S) pCoGWS-avGFP for spectinomycin resistance and encoding green protein
 - (∅) Non-transformed cells
- 3) Confirming appropriate selection by replicating the grown cells on plate added with IPTG (1mM) to induce protein expression to validate that the appropriate cells grew.

Control of expression for each transformed plasmid in BL21(DE3) after spreading on a plate containing the appropriate antibiotic.

