

Chloramphenicol

#GAB05.0005

(for research only)

Product:	Chloramphenicol is a bacteriostatic agent that acts by binding to the 50S ribosomal subunit inhibiting peptidyl transferase required for protein synthesis. Chloramphenicol is broad-spectrum antibiotic, effective against a wide variety of Gram(+) and Gram(-) bacteria. Chloramphenicol is frequently used for the selection of bacteria transformed with a vector harbouring a gene conferring chloramphenicol resistance (CAT), but it is also used to increase production of low-copy number plasmids, containing the pMB1 origin.
Quantity:	5g
Appearance:	white or slightly yellow needle crystals or crystalline solid
Storage:	2°C–8°C for at least to 3 years.
Preparation:	Prepare a stock solution of 25-34mg/ml in 100% ethanol. Do not autoclave. Store stock solution at -20°C.
Usage:	For incorporation in agar plates or broth, add chloramphenicol to a final concentration of 10-170µg/ml by adding to autoclaved media agar, just prior to pouring the plates, or to broth after cooling down to room temperature.

Suggested protocol for increasing production of low-copy number plasmids:
grow cells in rich medium, containing appropriate antibiotic, until OD600nm = 0,4 and then add chloramphenicol to a final density of 170µg/ml. Incubate with vigorous shaking for another 12-16h. Depending on medium composition, cell line, plasmid, temperature and other conditions, optimize initial density, incubation time and/or final chloramphenicol concentration.

Specifications:

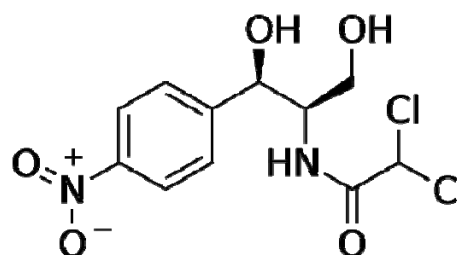
Formula: C₁₁H₁₂Cl₂N₂O₅

MW: 323,1 g/mol

Purity: >98% (on dry basis)

Solubility (H₂O): 2,5g/l

Water content: <0,5%



ORDERING INFORMATION – Molecular Cloning – Common Reagents

Reference #	Product Name	Quantity
GAB01.0005	IPTG (max 5 ppm dioxane)	5 g
GAB02.0005	X-Gal	5 g
GAB03.0005	Ampicillin (sodium salt)	5 g
GAB04.0005	Kanamycin (sulphate)	5 g
GAB05.0005	Chloramphenicol	5 g
GAB06.0005	Carbenicillin (disodium salt)	5 g
GAB07.0005	Tetracycline (hydrochloride)	5 g
GAB08.0005	Gentamycin powder	5 g

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