

Chromosome medium

The ready-to-use medium serves as a basis for chromosome analysis and is standardized. It is produced with and without lectins. The lectins produce the activation of the lymphocytes, in order to reach a high mitotic activity of the cells. The mitotic

cells can consequently be stopped with Colchicine and Colcemid. After spreading ("to sprite") the cells on a microscope slide and the staining of the cells, the chromosomes can be shown in the different separating phases.

Product	Cat. No.	Unit
Chromosome medium A without phytohemagglutinine (PHA) L Storage temperature: -20 °C	F 5013	100 ml
Chromosome medium B with phytohemagglutinine (PHA) L Storage temperature: -20 °C	F 5023	100 ml

Additives for chromosome analysis	Cat. No.	Unit
Colchicine, 10 µg/ml in PBS, without Ca ²⁺ , Mg ²⁺ Storage temperature: -20 °C	L 6211	25 ml
Colcemide (Demecolcine), 10 µg/ml in PBS, without Ca ²⁺ , Mg ²⁺ Storage temperature: -20 °C	L 6221	25 ml
Colcemide (Demecolcine), 10 µg/ml in Hanks' saline solution (HBSS) Storage temperature: -20 °C	L 6231	25 ml

Safety precautions:

- wear suitable, protective clothing
- after contact with skin, wash immediately with plenty of water
- in case of an accident, seek medical advice immediately

A precise instruction for the chromosome analysis is available on page 112 in chapter "Cell culture reagents".

Formulation

Tab. 12: Composition of the Chromosome medium

Substance	Concentration per 1000 ml	Substance	Concentration per 1000 ml
MEM (Joklik) with non-essential amino acids	850 ml	Streptomycin sulfate	50 mg
Fetal Bovine Serum (FBS)	150 ml	Phytohemagglutinine L*	2.5 mg
Heparin	25000 U	Ascorbic acid	5.0 mg
Penicillin G, sodium salt	75000 U	Glutathione (reduced)	5.0 mg

* for Chromosome medium B