

Training Cell culture - Course E102

This course conveys comprehensive expert knowledge for cell cultivation and experimental use of cultivated cell. The course starts with biological and technical fundamentals of cell cultivation and communicates appropriate handling of cells in numerous practical experiments. In addition guidelines on good cell culture practice (GCCP) and quality assurance measures will be presented.

The course program also includes applications based on cell cultures and focuses on cell based assays, gene transfer, RNA interference and genome editing. Another focus will be the cultivation of primary cells.

The course focuses mainly on:

- Fundamentals of cell biology and cell physiology
- Sterile working techniques
- sterilization, disinfection and cleaning in the cell culture lab
- Basic cultivation techniques for adherent and suspension cells
- Cell culture media and supplements (including basic components, L-glutamine, buffers, serum)
- Cell culture vessels and their impact on cell physiology
- Cell counting (including counting chamber, automated counting)
- Cryopreservation and cell banking
- Contamination management (including mycoplasma, cross contamination)
- Authentification of cell lines
- Overview on cell based assays (including MTT test, dye exclusion, proliferation)
- Experimental design for cell based assays
- Microscopy in cell culture (including fluorescence microscopy)
- Nucleic acid transfer (including transfection and viral transduction)
- Molecular manipulation of cells (including expression of heterologous proteins, RNA interference, genome editing)
- Special requirements of primary cell culture
- Quality assurance according to good cell culture practice (GCCP)
- Information research and documentation
- Standardization in the cell culture lab

No special previous knowledge is required for this course.

Duration: 5 days (beginning: 9:30 a.m. - end: 5:00 p.m.)

Course fee: € 1,450.00 (plus 19% VAT) incl. work materials, course documentation, confirmation of participation including detailed course contents, lunch, snacks and beverages.

LAB-ACADEMY

Dr. Battke SCIENTIA GmbH Life Science Services



Optional final examination: On demand, a final examination can be taken subsequently to the course. The examination fee is € 125,00 (plus 19% VAT) and is not included in the participation fee.

The examination will be held after the end off he course (Friday 4:30 to 5:30 p.m.) or at an date fixed optionally. Registration for the examination is possible together with booking the course or also during the course.

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Geschäftsführer: Dr. Florian Battke