

Safety Guidelines and Instructions for Laboratory Work in Genetic Engineering (Betriebsanweisung)

according to Paragraph 12 section 2 GenTSV

Containment Level 1 (S1)

Effective in area:

Anlagen Nr. 383/96, 571/02, 232/05, 194/10, 13/14, 92/14, 96/15, 570/15
Freie Universität Berlin, Institut für Chemie und Biochemie
Microscopy room K022, Takustraße 6, 14195 Berlin

Rooms are labelled with a sign indicating an installation to conduct genetic engineering and biotechnology laboratory work.

Project Manager (Lab/Group leader, *if other from Project Manager*) Gen-Anlage:

- 383/96 (S1) Prof. Freund Tel.: 838-51187,-53476, 015164964661
- 571/02 (S1) Prof. Sigrist Tel.: 838-56940, 01725872436
- 232/05 (S1) Prof. Schubert Tel.: 838-58759, 01637298887
- 194/10 (S1) Dr. Loll Tel.: 838-57348, 01773503488 (Prof. Wahl -53456)
- 13/14 (S1) Dr. Loll Tel.: 838-57348, 01773503488 (Prof. Heyd -62938)
- 92/14 (S1) Dr. Achazi Tel.: 838-59145, 015203150552 (Prof. Haag -52633)
- 96/15 (S1) Dr. Nürnberg Tel.: 838-56032, 01590172 7694/Prof. Alexiev -53581
- 570/15 (S1) Prof. Schubert Tel.: 838-58759, 01637298887

BBS (Takustr. 6): Dr. Loll Tel.: 838-57348, 015164964661

Technical emergency: Tel.: 55555

Occupational medicine (AMZ): Tel.: 450-570770

Safety at work: Tel.: 838-54496



Emergency call 112

Fire brigade 112

FU emergency call 55112

Dangers for Laboratory workers, Population and Environment

Section 7 GenTG: "Containment Level 1 is relating to laboratory work in genetic engineering which, according to the current knowledge of science, does not constitute any risk for human health and environment." The genetic engineering facility 92/14 is designed for work with eukaryotic cell lines and bacteria classified for handling at Containment Level 1. According to the current knowledge these organisms do not constitute either risk or danger for humans or the environment.

Precautions and Safety Instructions



Lab Coats mandatory



Eating and Drinking prohibited



Smoking prohibited

Any work in the laboratory requires approval by the project supervisor.

Personnel performing genetic engineering procedures must be qualified and adequately instructed by the project supervisor. Personnel must be lectured on possible hazards of the respective work place on an annual basis. Laboratory work in genetic engineering is subject to the keeping of appropriate records.

The rules of good laboratory practice are to be adhered to:

- When work is in progress, laboratory doors and windows must be closed.
- Use personal protective equipment! Wear laboratory coats or gowns, disposable gloves where required, and always protective goggles at the remotest risk for the eyes.
- Eating, drinking, smoking, snuffing, applying of cosmetics and storing of food, drinks and tobacco are absolutely prohibited in the laboratory!
- Mouth pipetting is prohibited! Mechanical pipetting instruments must be used instead.
- Minimize the generation of aerosols.
- Use syringes, cannulas and sharps only if absolutely necessary.
- Personnel wash their hands after finishing work.
- Keep laboratory tidy and clean; only instruments and material actually required in the work process are to be placed on work benches. Keep stocks of regulated material in separate storage rooms or cabinets, if possible.
- Laboratory work in genetic engineering is subject to the keeping of appropriate records

Incident Regulations

- Disinfect contaminated work surfaces and instruments (e.g. with a solution of 70% ethanol). Remove more substantial spills with cellulose or similar material prior to disinfecting and autoclave wiping material subsequently.
- Disinfect contaminated clothing or skin with alcohol disinfectant.
- Rinse eyes and mucous membranes profusely under running water.
- Treat injuries immediately under first aid conditions, if possible (if required, apply disinfectant). See a physician and inform him on the handled biological agents.
- Report all injuries to the laboratory supervisor without delay and, if GMO are involved, to the project supervisor.
- Observe fire protection rules and evacuation plans; familiarize with these manuals to prevent unnecessary delays in incidents of emergency.

Transport and Waste Disposal

Genetically modified organisms (GMO) have to be transported between genetic engineering installations in break- and leakproof containers only. This concerns also contaminated waste. All biological waste must be autoclaved and properly inactivated before disposal by trained personnel. They will also regularly check autoclave performance.

Literature, web sites for more information:

www.bvl.bund.de (Bundesamt für Verbraucherschutz und Lebensmittelsicherheit), www.rki.de (Robert-Koch-Institute), www.bba.de (Biologische Bundesanstalt für Land- und Forstwirtschaft)

