Yeast Estrogen Screen (YES) with Saccharomyces cerevisiae

Bioassay with genetically modified yeast cells to detect estrogenic effects of natural and synthetic substances.

**Storage of 10 x conc. glycerol stocks of yeast cells**
Max. 4 months at -20°C, long-term at -80°C

**Pre-culture**
Growth medium + glycerol stock

**Test culture**
Assay-Medium: Growth medium + yeast cells + CPRG

**Pipetting of the test plate**
Evaporate solvent, then add 200 µl assay medium per well

**Absorbance measurement after 72h**
Cell density (OD₆₂₀nm) and colour change (OD₅₄₀nm)

**Test principles**
- Expression of the human estrogen receptor
- Activation of the reporter gene
- Induction of the enzyme β-galactosidase
- Colour change of the medium

**Data evaluation**
Calculation of the Estradiol Equivalent Concentration (EEQ) of the environmental samples, derived from the standard curve.