new_diagnostics

A-YGS

The innovative yeast assay for the effect-based detection of glucocorticoid activity

BRIEF DESCRIPTION

The **A-YGS** utilizes the non-conventional yeast biosensor *Arxula adeninivorans*, which carries the gene for the human glucocorticoid receptor and the gene for the reporter enzyme phytase. Binding of ligands to the receptor will subsequently activate the production of the reporter enzyme. The measured absorbance at 405 nm correlate with the total glucocorticoid activity in the sample. The determination of Corticosterone Equivalents (CEQ) is achieved by using sigmoidal dose-response relationship.

KEY SPECIFICATIONS

- Calibration standard: Corticosterone (CN)
- LOD*: 14.8 µg/L CN
- LOQ*: 20.6 µg/L CN
- Calibration Range: 0 – 250 µg/L CN
- Total assay time: approx. 26 h

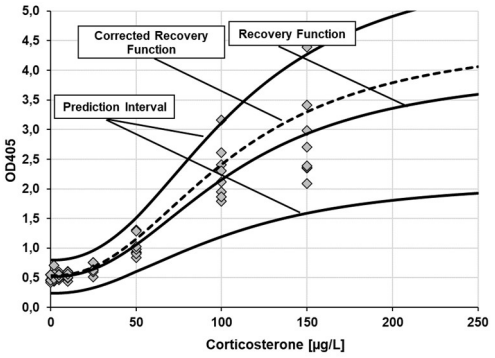
*refers to the results of the in-house validation study

BENEFITS AT A GLANCE

- Quality approved ready-to-use test kit
- No sterile workplace required
- Biosensor contains no antibiotic resistance markers
- Less required sample volume
- Automated data evaluation with BioVAL

VALIDATION

The validation of the **A-YGS** was performed according to a factorial in-house validation study with eight different water samples including drinking and environmental water. The samples were spiked with different concentrations of Corticosterone. In this study, relevant parameters affecting the test performance were systematically varied. The validation was planned and accomplished by QuoData GmbH.



BIOVAL

- Web-based software with individual user account
- Application of up-to-date statistical approaches
- Comprehensive editable report

SPECIAL LABORATORY REQUIREMENTS

- BSL1 laboratory
- Incubator + Shaker for microplates (T=86 °F, Orbit mind. 3 mm)
- Photometer for microtiter plates (λ=405 and 630 nm)

new_diagnostics gmbh_bioanalytical solutions for food, environment & medical applications_Fabeckstraße 43_14195 Berlin Germany
T +49 (0)351 – 4028867 54_F +49 (0)351 – 4028867 19_info@new-diagnostics.com_ www.new-diagnostics.com August 2023