

# THERAPEUTICS & DIAGNOSTICS

## High-performance Immunoassay for the Detection of Estradiol

### Description:

A 2<sup>nd</sup> generation "sandwich-type" immunoassay with exceptionally high sensitivity for the detection of estradiol in a single one-step immunocomplex assay.

- Robust non-competitive (two binding site) assay format
- Significant advances achieved in terms of sensitivity, accuracy, usability, cost, speed & producibility compared to 1<sup>st</sup> gen competitive (one binding site) assay formats
- Highly sensitive: LoD = 11 pM
- Highly specific for 17beta-estradiol, with minimal cross-reactivity towards *e.g.*, estriol, estrone or testosterone
- The test components (antibodies) can be adapted to any immunoassay testing platform
- Antibodies can be applied to any desired label technology (*e.g.* ELISA, TR-fluorescence etc.)

**The IP is available for licensing to test developers and testing service providers from the TTO of the University of Turku (UTU).**

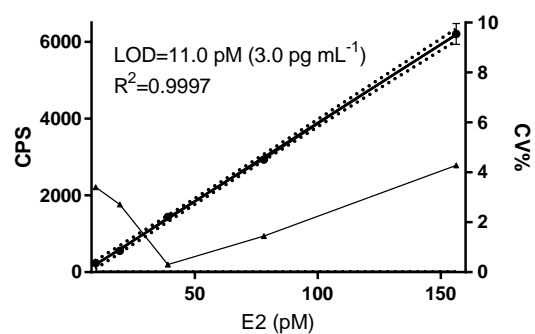
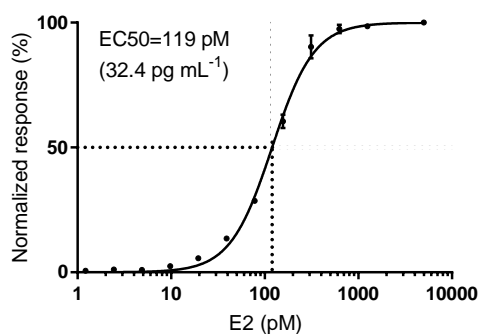
### Status: Technology Readiness Level (TRL) 5-6

The technology and components have been proven in various sample matrixes and assay formats. The assay is to be adapted to a testing platform selected by the licensee.

### Included in the license:

Two recombinant antibodies

- primary antibody specific for 17beta-estradiol
- Secondary antibody specifically recognizing the immunocomplex of estradiol and the primary antibody.



### Application Areas:

Monitoring of estradiol (E2) levels can be utilized clinically in the identification of fertility disorders in the hypothalamus-pituitary-gonad axis, gynecomastia, estrogen-producing ovarian and testicular tumors, and in hyperplasia of the adrenal cortex. In addition, estradiol levels can be used to monitor fertility therapy and determining the time of ovulation directly from urine. Potential end users include clinical laboratories and pharmaceutical companies.

### CONTACT INFORMATION

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