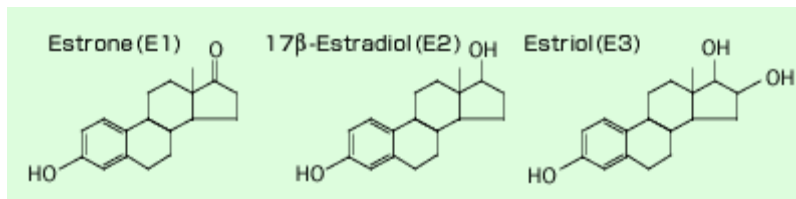




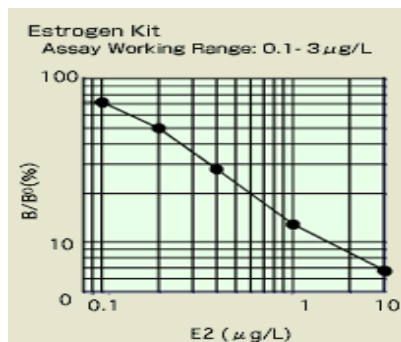
### Estrogen (E1/E2/E3) ELISA Kit

- ES monoclonal antibody binds exclusively with E1, E2 and E3, and does not show cross-reaction with other chemicals of similar structures. A monoclonal antibody is uniform in quality, generating very little lot-to-lot variation.
- The quantitative analysis ranges from 0.1µg/L to 3µg/L (ppb).
- The ELISA measurement is highly reproducible; the coefficient of variation (CV) is mostly under 10%.
- The assay requires less amount of harmful solvent than instrument analyses.
- With ease of handling, the total time for measurement is only 2.5 hours.
- The kit, a 96-well microplate format, enables simultaneous measurement of multiple samples at more reasonable cost.

### Chemical Structures of Targets



### Standard Curves



### Test Data

#### Recovery Test using River Water (n=4)

ES ELISA Kit	
Unspiked	
Determination (ng/L)	12.4
SD (%)	6.5
Spiked with 2ng/L E2	
Determination (ng/L)	14.4
SD (%)	9.2
Recovery (%) (n=4)	100.0

## Comparison with LC/MS/MS

### Comparison with LC/MS/MS

E1+E2 (ng/L)		
Sample	LC/MS/MS	ES ELISA Kit
A	2.08	3.75(1.8)
B	4.25	5.36(1.3)

Figures in parentheses indicate relative value to LC/MS/MS data.

## Cross-reactivity Pattern

### Estrogens

Compound	% Reactivity ES ELISA Kit
<b>Estron (E1)</b>	<b>87.0</b>
2-methoxy E1	<0.03
E1-3-sulfate	<0.03
<b>17<math>\beta</math>-Estradiol (E2)</b>	<b>100.0</b>
16-keto E2	118.0
2-methoxy E2	0.2
E2-17-glucuronide	5.0
E2-3-glucuronide	<0.03
E2-3-sulfate-17-glucuronide	0.5
<b>Estriol (E3)</b>	<b>55.0</b>
16-epi-E3	129.0
E3-16-glucuronide	48.0

### Other hormones

Compound	% Reactivity ES ELISA Kit
<i>cis</i> -Androsterone	<0.03
<i>trans</i> -Androsterone	<0.03
Cholesterol	<0.03
Dehydroisoandrosterone	<0.03
5 $\alpha$ -Dihydrotestosterone	<0.03
Hydrocortisone	<0.03
Pregnenolone	<0.03
Testosterone	<0.03

## Kit Format

Kit Format		Comment
Microplate	1 plate (96 wells)& reagents	Needs a microplate reader (450nm) For multiple and simultaneous measurement
Tube	20 tubes& reagents	Needs 1 mL cuvette and a spectrophotometer(450nm) For limited number of samples

For research use only. Not for diagnostic use.

