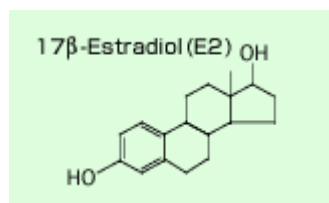




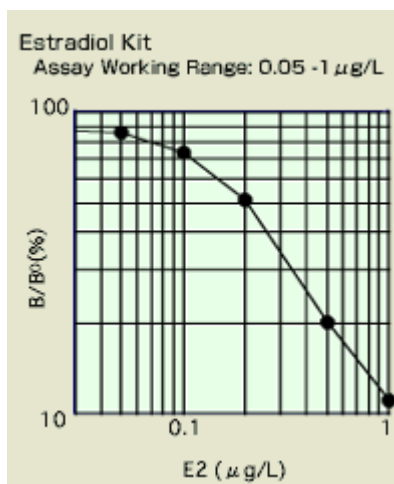
17 β -Estradiol (E2) ELISA Kit

- E2 monoclonal antibody binds exclusively with E2 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 0.05 μ g/L to 1 μ g/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 Structure



Standard Curves



Comparison with LC/MS/MS

Averaged value of E2 (ng/L)

Sample	N ^{a)}	LC-MS/MS	E2-JEC ^{b)}	E2-AD ^{c)}	E2-CC ^{c)}	E2-NG ^{c)}	E2-RB ^{c)}
Primary effluent	10	8.4	12.5	21.1	81.4	97.6	202.2
Aeration tank	13	1.9	2.1	4.4	9.4	7.8	31.6
Secondary effluent	5	1.2	2.6	5.3	15.1	18.8	75.9

a) N=number of samples

b) Ecologiena E2 kit

c) Other kits on the market (for biological samples)

Cross-reactivity Pattern

Estrogens

Compound	% Reactivity
	E2 ELISA Kit
Estron (E1)	1.3
2-methoxy E1	<0.4
E1-3-sulfate	1.0
17β-Estradiol (E2)	100.0
16-keto E2	16.0
2-methoxy E2	2.0
E2-17-glucuronide	<0.4
E2-3-glucuronide	16.0
E2-3-sulfate-17-glucuronide	<0.4
Estriol (E3)	0.6
16-epi-E3	0.5
E3-16-glucuronide	<0.4

Other hormones

Compound	% Reactivity
	E2 ELISA Kit
<i>cis</i> -Androsterone	<0.03
<i>trans</i> -Androsterone	<0.03
Cholesterol	0.46
Dehydroisoandrosterone	<0.03
5 α -Dihydrotestosterone	0.38
Hydrocortisone	0.38
Pregnenolone	0.35
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.

