

**Overview****Method Name**

Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS); Equilibrium Dialysis; Immunoradiometric Assay (IRMA)

**NY State Available**

Yes

**Specimen****Specimen Type**

Serum Red

**Specimen Required****Collection Container/Tube:**

**Preferred:** Red top

**Acceptable:** Serum gel tube

**Submission Container/tube:** Plastic vial

**Specimen Volume:** 3 mL

**Collection Instructions:**

1. Within 45 minutes of collection, centrifuge and aliquot 3 mL of serum into a plastic vial.
2. Freeze immediately after separation and send frozen.

**Specimen Minimum Volume**

1 mL (Note: This volume does not allow for repeat testing.)

**Reject Due To**

Plasma	Reject
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**Specimen Stability Information**

Specimen Type	Temperature	Time	Special Container
Serum Red	Frozen (preferred)	180 days	
	Ambient	48 hours	
	Refrigerated	48 hours	

**Clinical & Interpretive**

**Reference Values**

Estradiol, Serum MS

Units: pg/mL

Newborn:

Levels are markedly elevated at birth and fall rapidly during the first week to prepubertal values of &lt;15.

Males &lt;6 m:

Levels increase to 10 - 32 between 30 and 60 days, then decline to prepubertal levels of &lt;15 by six months.

Females &lt;1 y:

Levels increase to 5.0 - 50 between 30 and 60 days, then decline to prepubertal levels of &lt;15 during the first year.

Prepubertal: &lt;15

Adult Males: 8.0 - 35

Adult Females:

Follicular: 30 - 100

Luteal: 70 - 300

Postmenopausal: &lt;15

Free Estradiol, Percent

Units: %

Adult Males: 1.7 - 5.4

Adult Females: 1.6 - 3.6

Free Estradiol, Serum

Units: pg/mL

Adult Males: 0.2 - 1.5

Adult Females: 0.6 - 7.1

Sex Hormone Binding Globulin

Units: nmol/L

Infants (1 - 23m): 60.0 - 252.0

Prepubertal: 72.0 - 220.0

Pubertal:

Males: 16.0 - 100.0

Females: 36.0 - 125.0

Adult Males:

20 - 49 y: 16.5 - 55.9

>49y: 19.3 - 76.4

Adult Females:

20 - 49y: 24.6 - 122.0

>49y: 17.3 - 125.0

## Performance

### PDF Report

No

### Day(s) Performed

Varies

### Report Available

10 to 16 days

### Performing Laboratory Location

Esoterix Endocrinology

## Fees & Codes

### Fees

- Authorized users can sign in to [Test Prices](#) for detailed fee information.
- Clients without access to Test Prices can contact [Customer Service](#) 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact [Customer Service](#).

### Test Classification

This test was developed and its performance characteristics determined by LabCorp. It has not been cleared or approved by the Food and Drug Administration.

### CPT Code Information

82681 – Free Estradiol

84270 - Sex Hormone binding globulin

82670 - Estradiol

**LOINC® Information**

Test ID	Test Order Name	Order LOINC® Value
FFES	Free Estradiol with SHBG	Not Provided

Result ID	Test Result Name	Result LOINC® Value
Z0228	Free Estradiol, Percent	14960-9
Z0229	Free Estradiol, Serum	2240-0
Z0230	Sex Hormone Binding Globulin (SHBG)	13967-5
Z0259	Estradiol, Serum	35384-7