

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

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**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