

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

Draw blood in a plain red-top tube (serum gel tube is acceptable). Spin down, pour off into plastic vial within 45 minutes of collection, and send 3 mL serum frozen.

Specimen Minimum Volume

1.0 mL Note: This volume does not allow for repeat testing.

Reject Due To

Hemolysis	NA
Lipemia	NA
Icterus	NA
Other	Plasma

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

Age	Range
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Newborn

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

Males <6 m

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

Females <1 y

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

Prepubertal	<15
Adult Males	8.0 - 35
Adult Females	
Follicular	30 - 100
Luteal	70 - 300
Postmenopausal	<15

Free Estradiol, Percent

Units: %

Age	Range
Adult Males	1.7 - 5.4
Adult Females	1.6 - 3.6

Free Estradiol, Serum

Units: pg/mL

Age	Range
Adult Males	0.2 - 1.5
Adult Females	0.6 - 7.1

Sex Hormone Binding Globulin

Units: nmol/L

Age	Range
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

Test Definition: FFES

Estradiol Free, Serum (includes Estradiol and SHBG)

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