



Pathology and Laboratory Medicine

FREE ANDROGEN
INDEX and
CALCULATED FREE
AND BIOAVAILABLE
TESTOSTERONE,
PLASMA/
SERUM



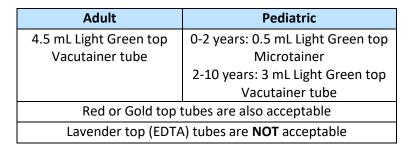
Turnaround Time: 5 days

Alternate Name(s):

FAI

Free Testosterone Bioavailable Testosterone

Specimen:





Laboratory: Core Lab



Requisition:

GENERAL LABORATORY REQUISITION



Method of Analysis:

Roche

Electrochemiluminescence

Collection Information:

Minimum volume of plasma or serum required is 700 μ L for adult samples or 200 μ L for pediatric samples.



Test Schedule: Monday - Friday

0800-1600

Reference Ranges:

Male				
Age (Years)	Free Testosterone (Calculated) (pmol/L)	Bioavailable Testosterone (Calculated) (nmol/L)	Free Androgen Index (%)	
0-<1*	0.1-198.4	≤4.23	≤32.7	
1-<9	≤4.5	≤0.72	≤0.6	
9-<12	1.4-250.6	≤7.39	0.1-34.7	
12-<14	≤435.0	≤7.39	0.1-34.7	
14-<20	13.0-670.0	0.42-12.00	3.6-83.3	
20-<50	198.0-619.0	4.36-14.30	35.0-92.6	
≥50	163.0-473.0	3.59-11.00	24.3-72.1	





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Female				
Age (Years)	Free Testosterone (Calculated) (pmol/L)	Bioavailable Testosterone (Calculated) (nmol/L)	Free Androgen Index (%)	
0-<1*	0.3-9.1	≤0.21	≤1.3	
1-<6	≤4.5	≤0.21	≤1.3	
6-<9	0.3-10.5	≤0.21	≤1.3	
9-<14	0.5-16.4	≤0.38	0.1-2.6	
14-<20	1.0-34.3	0.13-0.80	0.6-6.5	
20-<50	3.0-33.0	0.06-0.76	0.3-5.6	
≥50	1.0-20.0	≤0.43	0.2-3.6	

^{*}Reference interval for 0-<1 year is for infants born at term.

Comments:

Free testosterone and bioavailable testosterone are calculated based on equations from Vermeulen A et al. J Clin Endocrinol Metab. 1999. 84(10):3666-3672.

FAI = total testosterone (nmol/L)/SHBG (nmol/L) expressed as a percentage.

Results should be interpreted with caution in patients with greatly abnormal albumin concentrations.

Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. >5 mg/day) until at least 8 hours after the last biotin administration.

Storage and Shipment:

Store and ship plasma or serum refrigerated.