
Lab Dept: Chemistry

Test Name: IGF-1 (SOMATOMEDIN C)

General Information

Lab Order Codes: INGF1

Synonyms: Somatomedin C, Insulin-like Growth Factor-1, IGF-1; IGF1

CPT Codes: 84305 - Somatomedin

Test Includes: N/A

Logistics

Test Indications: For the determination of growth disorders and in monitoring accordingly.

Lab Testing Sections: Chemistry – (performed on Minneapolis Campus)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: Performed daily

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: Red NO GEL (preferred)
Alternate: Green NO GEL

Draw Volume: 1.8 mL (Minimum: 0.6 mL) blood

Processed Volume: 0.6 mL (Minimum: 0.2 mL) serum

Note: Submission of minimum volume does not allow repeat analysis

Collection: Routine blood collection

Special Processing: Lab Staff: Centrifuge specimen as soon as possible after draw, or within 1 hour of draw, remove serum aliquot into a screw-capped round bottom plastic vial. Store and ship at frozen temperatures. Forward promptly.

Patient Preparation: None

Sample Rejection: Misabeled or unlabeled specimens; samples exceeding stability limits

Interpretive

Reference Range:

Age	Male (ng/mL)	Female (ng/mL)
0 - 11 months	27 – 166	18 - 130
1 year	30 - 175	20 - 138
2 years	34 - 194	22 - 154
3 years	39 - 215	26 - 175
4 years	44 - 235	31 - 201
5 years	50 - 256	36 - 227
6 years	56 - 279	42 - 254
7 years	63 - 306	49 - 286
8 years	72 – 341	57 - 326
9 years	84 - 384	67 - 374
10 years	97 – 431	80 - 427
11 years	112 - 477	93 - 477
12 years	126 - 517	105 - 518
13 years	139 – 544	116 - 545
14 years	148 – 554	123 - 555
15 years	152 – 554	127 - 554
16 years	152 - 542	127 - 542

17 years	149 – 521	123 - 517
18 years	143 – 494	118 - 486
19 years	137 – 463	111 - 451
20 years	129 – 430	105 - 416
21 – 25 years	106 - 414	86 - 383
25 – 35 years	86 - 309	70 - 296
Tanner Stages	Male	Female
I	81 - 255	86 - 323
II	106 - 432	118 - 451
III	245 – 511	258 - 529
IV	223 - 578	224 - 586
V	227 - 518	118 - 512

Critical Values:

N/A

Limitations:

This method is affected by supplemental biotin. Unexpected results or results that do not match clinical presentation should be repeated at least 24 hours after the last dose of supplemented biotin, which includes multivitamins.

Heterophilic antibodies in the serum of patient routinely exposed to animals or animal products interfere with immunoassays and anomalous values may be observed.

Methodology:

Chemiluminescence, including incubation with acid solution to dissociate IGF-1 from the binding protein.

References:

IGF-1 Instructions for Use, IDS, Sys REF IS-3900 v07, 17 Aug 2017

Updates:

12/20/2017: Updated reference ranges
6/19/2017: New test method: inhouse