



**IgG Subclasses –
The Comprehensive Solution
for IgG Determination**

Answers for life.

SIEMENS

Total IgG and IgG Subclass determination from one source

The determination of IgG subclass concentrations has become increasingly important in clinical diagnostics. It is indicated for diagnostic clarification in patients with:

- Increased susceptibility to infection ¹
- A malfunctioning immune defense ¹
- Abnormally frequent and/or prolonged or severe infections that cannot be explained by standard clinical and laboratory data ²

Measuring only total IgG may mask deficiencies in subclasses 2, 3 and/or 4 due to a possible high concentration of predominant IgG 1.

The attached reference ranges give a broad overview on the different subclass concentrations from early childhood to adulthood to support your diagnosis. They have been established with Siemens assays and analyzers for IgG determination.

Assays and analyzers optimally aligned

Siemens Healthcare Diagnostics has years of experience in developing innovative assays and analyzers. By optimally aligning and offering both, we provide you with a powerful combination for complete reliability in IgG subclass testing. In combination with the highly responsive service and scientific support, you receive a comprehensive solution for IgG determination that improves your patient management and the utilization of your resources.

Please ask your local Siemens representative for more detailed information.

References:

1. Zielen S. In: Thomas L, ed. Clinical Laboratory Diagnostics. Frankfurt: TH-Books Verlagsgesellschaft. 1998; 678-681.
2. Meulenbroek AJ, Zeijlemaker WP. Human IgG subclasses: Useful diagnostic markers for immunocompetence. Available at: www.researchd.com/rdikits/rdisubbk.htm. Accessed December 23, 2005.

Reference ranges in serum

| Age Group | n | Total IgG 2.5 th - 97.5 th %tile (g/L) | IgG1 2.5 th - 97.5 th %tile (g/L) | IgG2 2.5 th - 97.5 th %tile (g/L) | IgG3- 2.5 th - 97.5 th %tile (g/L) | IgG4- 2.5 th - 97.5 th %tile (g/L) |
|-----------------------|-----|---|--|--|---|---|
| ≤ 1 year | 29 | 2.29 - 9.54 | 1.51 - 7.92 | 0.26 - 1.36 | 0.093 - 0.920 | 0.004 - 0.464 |
| > 1 to ≤ 3 years | 84 | 3.11 - 12.04 | 2.65 - 9.38 | 0.28- 2.16 | 0.087 - 0.864 | 0.009 - 0.742 |
| > 3 to ≤ 6 years | 113 | 4.77 - 15.51 | 3.62 - 12.28 | 0.57 - 2.90 | 0.129 - 0.789 | 0.013 - 1.446 |
| > 6 to ≤ 12 years | 105 | 5.65 - 15.22 | 3.77 - 11.31 | 0.68 - 3.88 | 0.158 - 0.890 | 0.012 - 1.699 |
| > 12 to ≤ 18 years | 86 | 6.07 - 14.84 | 3.62 - 10.27 | 0.81 - 4.72 | 0.138 - 1.058 | 0.049 - 1.985 |
| > 18 years | 279 | 7.37 - 16.07 | 4.05 - 10.11 | 1.69 - 7.86 | 0.11 - 0.85 | 0.03 - 2.01 |

The above reference ranges (2.5th to 97.5th percentile in g/L) were established by testing samples from 417 apparently healthy children from North America and Central Europe as well as 279 apparently healthy adults from Central Europe (data on file).

Siemens Healthcare Diagnostics, a global leader in clinical diagnostics, provides healthcare professionals in hospital, reference, and physician office laboratories and point-of-care settings with the vital information required to accurately diagnose, treat, and monitor patients. Our innovative portfolio of performance-drive solutions and personalized customer care combine to streamline workflow, enhance operational efficiency, and support improved patient outcomes.

Product availability may vary from country to country and is subject to varying regulatory requirements. Please contact your local representative for availability.

This brochure is for use outside the U.S.

Global Division

Siemens Healthcare Diagnostics Inc.
511 Benedict Avenue
Tarrytown, NY 10591-5005
USA
www.siemens.com/diagnostics

Global Siemens Headquarters

Siemens AG
Wittelsbacherplatz 2
80333 Muenchen
Germany

Global Siemens Healthcare Headquarters

Siemens AG
Healthcare Sector
Henkestrasse 127
91052 Erlangen
Germany
Telephone: +49 9131 84 - 0
www.siemens.com/healthcare

www.siemens.com/diagnostics