

# C1q Antibody, IgG

Systemic lupus erythematosus (SLE) is an autoimmune disease with multiorgan involvement. Approximately 37-45% of patients with SLE will develop lupus nephritis, which negatively impacts patient survival.<sup>1</sup> Testing for C1q antibodies assists in evaluating the risk of lupus nephritis development.<sup>2</sup>

## Disease Overview

### Physiology

C1q antibodies are associated with active glomerulonephritis in patients with SLE.<sup>2</sup> The presence of antibodies in patients with SLE indicates a higher risk for developing severe clinical manifestations of the disease. Specifically, the presence of C1q antibodies correlates with renal activity and flares, and the absence of antibodies indicates a low probability of lupus nephritis.<sup>2</sup>

## Test Interpretation

### Sensitivity/Specificity

- Clinical sensitivity and specificity vary based on disease population and disease state
- Analytical sensitivity and specificity vary based on disease population and disease state as well as testing platform

### Results

- Negative: 0-19 units
- Equivocal: 20-39 units
- Positive: ≥40 units

### Limitations

- Not all patients with lupus nephritis will be positive for C1q antibodies
- The presence of C1q antibodies is not specific for SLE

## References

1. Albuquerque BC, Salles VB, Tajra RDP, et al. [Outcome and Prognosis of Patients With Lupus Nephritis Submitted to Renal Transplantation](#). *Sci Rep*. 2019;9(1):11611.
2. Wener MH. [Tests for circulating immune complexes](#). *Methods Mol Biol*. 2014;1134:47-57.

## Related Information

[Antinuclear Antibody \(ANA\) With HEp-2 Substrate](#)  
[Mixed Connective Tissue Disease - MCTD](#)  
[Systemic Lupus Erythematosus - SLE](#)

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## Featured ARUP Testing

### Anti-C1q Antibody, IgG 2007601

**Method:** Semi-Quantitative Enzyme-Linked Immunosorbent Assay

- Assess risk for lupus nephritis development in individuals with SLE
- Assess global SLE disease activity