

# Autoimmune Zoomer

# **Key Clinical Messages**

A comprehensive panel designed to detect and monitor autoimmune conditions by measuring specific autoantibodies and antigens.

### What is the Autoimmune Zoomer?

The Autoimmune Zoomer identifies specific autoimmune markers early and accurately. Using bio-chip immunofluorescence and ELISA technology, it provides simultaneous ANA IFA, ENA, and additional marker testing, offering higher sensitivity and specificity than single ANA IFA tests. The microarray-based assay detects ANA and ENA simultaneously for early diagnosis.

Automated technology includes controls on every chip and multiple tests per analyte, reducing instrument variation and operator interpretation. The Autoimmune Zoomer includes markers indicating systemic autoimmunity, thyroid conditions, rheumatoid arthritis, type 1 diabetes, and more for an integrated approach to managing autoimmune disorders.

### What Does the Test Measure?

The Autoimmune Zoomer measures a variety of autoantibodies and antigens, providing a detailed assessment of patient immune response and identifying potential autoimmune conditions.

By analyzing markers such as thyroid peroxidase, thyroglobulin, insulin, islet cell antigens, and myelin basic protein, you'll gain a comprehensive view of immune-mediated tissue damage so you can accurately diagnosis and manage conditions like autoimmune thyroid diseases, type 1 diabetes, and multiple sclerosis.

# Why Order the Autoimmune Zoomer?

Order the Autoimmune Zoomer to accurately diagnose a wide range of autoimmune diseases, personalize treatment plans, and improve patient outcomes through early detection and monitoring of disease progression.

# Which Patients Will Benefit from this Test?

Patients experiencing unexplained symptoms like chronic fatigue, joint pain, skin rashes, digestive issues, or neurological problems. Those with a family history of autoimmune diseases or presenting with conditions that have not responded to standard treatments would also benefit from this testing.

# Vibrant Advantage

Our comprehensive Autoimmune Zoomer provides early and precise autoimmunity detection with advanced testing technology:

- Combines a wide range of markers into a single panel, simplifying the testing process for both you and your patients.
- Automated microarray technology enables precise results by placing controls on every chip and including duplicate analytes on each pillar for built-in repeat sample.
- Measures 63 markers using solid phase bio-chip immunofluorescence assay and ELISA technology for high sensitivity and specificity.
- Detailed reports that help in accurately diagnosing and managing autoimmune conditions.

### Lab Methodology

Our advanced lab methodology utilizes solid phase bio-chip immunofluorescence assay testing and ELISA technology for precise detection of autoimmune conditions.

This microarray-based assay allows for simultaneous ANA IFA detection and ENA testing, offering higher sensitivity and specificity compared to a single ANA IFA test.

By enabling simultaneous ANA and ENA testing, our methodology significantly enhances the early detection of autoimmune conditions.

Vibrant is a CLIA certified and CAP accredited lab.

# Which Markers Are Included in the Autoimmune Zoomer?

Category	Marker	Category	Marker
Blood Vessels	Beta-2 glycoprotein I (β2GPI) Cardiolipin Proteinase 3 (ANCA)	Muscular System	Cardiac myosin Jo-1 (histidyl-tRNA synthetase) PM/Scl75 PM/Scl100 Titin
Central Nervous System	Myelin basic protein (MBP)		
Dry Eyes and Mouth	α-fodrin SSA 52kDa SSA 60kDa SSB	Pancreas	Insulin Islet Cell Antigen 1 Islet Cell Antigen 2 Glutamic Acid Decarboxylase 65 (GAD65) Glutamic Acid Decarboxylase 67 (GAD67)
Еуе	Aquaporin-4 (AQP4) Interphotoreceptor retinoid-binding protein (IRBP, RBP3)	Peripheral Nervous System	Ganglioside GM1 Myelin-associated glycoprotein (MAG)
Gut	Parietal cell antibodies (PCA) Anti S. cerevisiae antibody (ASCA) Tissue transglutaminase (tTG) IgG Tissue transglutaminase (tTG) IgA Deaminated gliadin (DGP) IgG Deaminated gliadin (DGP) IgA	Skin	Centromere protein A (CENP A) Centromere protein B (CENP-B) Desmoglein 1 Desmoglein 2 Desmoglein 3 Type VII collagen Scleroderma-specific antibodies (Scl- 70) RNA Polymerase 3
Immune Health	Interferon-α/β receptor 1 Interferon-α/β receptor 2 Platelet antigens (GPIIb) Platelet antigens (GPIIIa)		
Inflammation	hs-CRP	Systemic Autoimmunity	Sm antigen Sm/RNP SmD SmD1 SmD2 SmD3 Nucleosome/Chromatin Histones Double-stranded DNA (dsDNA) Antinuclear antibodies (ANA)
Joints/Arthritis	Collagen type II Rheumatoid Factor (RF) IgM Citrullinated Peptide Antibodies (Anti-CCP3) IgG and IgA		
Kidney	α-actinin		
Liver	Microsomal antibodies (anti-LKM1) Smooth muscle antibodies (ASMA)		
Mixed Connective Tissue	U1-snRNP 68/70 kDa U1-snRNP A U1-snRNP C U1-snRNP B/B'	Thyroid	Thyroglobulin (TG) Thyroid peroxidase (TPO)



#### The **Autoimmunity Zoomer** provides early diagnosis for a wide range of autoimmune diseases

Personalize treatment plans and improve patient outcomes through early detection and monitoring of autoimmune disease progression.

# **Clinical Pearls**

#### **Precision in Autoimmune Detection**

The Autoimmune Zoomer utilizes solid-phase bio-chip immunofluorescence assay and ELISA technology to provide precise detection of autoimmune markers.

This dual ANA and ENA testing achieves higher sensitivity and specificity than standard testing, ensuring accurate evaluation of autoimmune diseases.

## Early Detection for Complex Autoimmune Disorders

The Autoimmune Zoomer is particularly beneficial for patients presenting with non-specific symptoms such as chronic fatigue, joint pain, and gastrointestinal issues.

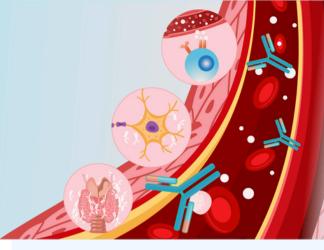
Early detection of markers like anti-CCP for rheumatoid arthritis and tTG for celiac disease can lead to timely and targeted treatment, improving patient outcomes and preventing disease progression in vulnerable populations.

#### **Comprehensive Autoimmune Health Insight**

By covering a broad range of autoimmune markers, including those for multiple sclerosis, Sjögren's syndrome, and lupus, the Autoimmune Zoomer serves as a comprehensive tool for investigating the root causes of chronic illnesses.

This holistic approach allows healthcare providers to uncover underlying autoimmune responses that may contribute to systemic conditions, facilitating more effective and tailored interventions.

# Which Tests Pair Well With the Autoimmune Zoomer?



### **Reference Ranges**

Reference ranges have been established using a cohort of 192 apparently healthy individuals.

Adult reference ranges and corresponding 90% confidence intervals (CIs) were calculated in accordance with Clinical and Laboratory Standards Institute guidelines.

For antibody results, the classification of green denotes a result that is within the normal reference range, the classification of yellow denotes a result that is moderately elevated titre with respect to the reference range and the classification of red denotes a result that is elevated with respect to the normal reference range.

# **Test Preparation**

There are no fasting, dietary, hydration, medication change, or other test preparations required for the Autoimmune Zoomer.

However, taking steroids, immunosuppressive medications, biologic agents, or other immunomodulating medications may falsely lower or falsely increase total and specific immunoglobulin results.

- Wheat Zoomer: Identifies the full range of wheat and gluten sensitivities, as well as intestinal permeability that may contribute to autoimmune symptoms.
- **Gut Zoomer:** Assess dysbiosis that may play a role in the development of RA and other autoimmune diseases.
- Thyroid Panel: Evaluates thyroid diseases, which are more prevalent in patients with connective tissue disorders
- **Tickborne Disease:** Infectious disease from tick-associated organisms can trigger autoimmune conditions like Lyme arthritis, Lyme carditis, and Lyme neuroborreliosis.
- Lyme Autoimmunity: Tests for antigens known to trigger the autoimmune conditions Lyme arthritis, Lyme carditis, and Lyme neuroborreliosis. Identifies if the patient has Lyme arthritis vs. rheumatoid arthritis, making this test valuable for differential diagnosis.