

## Immune Zoomer

The Immune Zoomer evaluates a broad set of tissue-specific immune markers that reflect how the immune system is interacting with key organs and systems throughout the body. Markers are organized across systemic, endocrine, musculoskeletal, neurological, gastrointestinal, and vascular domains to show where immune activity is concentrated and how patterns may overlap across systems. Together, they provide a structured view of immune balance, tissue stress, and multi-system immune involvement, supporting more straightforward interpretation and more targeted clinical decisions.

Joint, Muscle, and Connective Tissue	Systemic Autoimmunity
<ul style="list-style-type: none"> <li>• Collagen type II</li> <li>• Rheumatoid Factor (RF) IgM</li> <li>• Citrullinated Peptide Antibodies (Anti-CCP3) IgG</li> <li>• Citrullinated Peptide Antibodies (Anti-CCP3) IgA</li> <li>• Cardiac myosin</li> <li>• Jo-1 (histidyl-tRNA synthetase)</li> <li>• PM/Scl-75</li> <li>• PM/Scl-100</li> <li>• Titin</li> <li>• U1-snRNP 68/70 kDa</li> <li>• U1-snRNP A</li> <li>• U1-snRNP C</li> <li>• U1-snRNP B/B'</li> <li>• <math>\alpha</math>-actinin</li> <li>• Smooth muscle antibodies (ASMA)</li> </ul>	<ul style="list-style-type: none"> <li>• Antinuclear antibodies (ANA)</li> <li>• Double-stranded DNA (dsDNA)</li> <li>• Sm antigen</li> <li>• Sm/RNP</li> <li>• SmD</li> <li>• SmD1</li> <li>• SmD2</li> <li>• SmD3 Nucleosome / Chromatin</li> <li>• Histones</li> </ul>
Neurological and Sensory Tissues	Gut and Intestinal Immune Activity
<ul style="list-style-type: none"> <li>• Myelin basic protein (MBP)</li> <li>• Ganglioside GM1</li> <li>• Myelin-associated glycoprotein (MAG)</li> <li>• Aquaporin-4 (AQP4)</li> <li>• Interphotoreceptor retinoid-binding protein (IRBP / RBP3) <math>\alpha</math>-fodrin</li> <li>• SSA 52 kDa</li> <li>• SSA 60 kDa</li> <li>• SSB</li> </ul>	<ul style="list-style-type: none"> <li>• Parietal cell antibodies (PCA)</li> <li>• Anti-Saccharomyces cerevisiae antibodies (ASCA)</li> <li>• Tissue transglutaminase (tTG) IgG</li> <li>• Tissue transglutaminase (tTG) IgA</li> <li>• Deaminated gliadin peptide (DGP) IgG</li> <li>• Deaminated gliadin peptide (DGP) IgA</li> </ul>
Endocrine and Metabolic Autoimmunity	Vascular and Immune-Signaling Markers
<ul style="list-style-type: none"> <li>• Thyroglobulin (TG)</li> <li>• Thyroid peroxidase (TPO)</li> <li>• Insulin</li> <li>• Islet Cell Antigen 1 (ICA1)</li> <li>• Islet Cell Antigen 2 (ICA2)</li> <li>• Glutamic Acid Decarboxylase 65 (GAD65)</li> <li>• Glutamic Acid Decarboxylase 67 (GAD67)</li> </ul>	<ul style="list-style-type: none"> <li>• Beta-2 glycoprotein I (<math>\beta</math>2GPI)</li> <li>• Cardiolipin</li> <li>• Proteinase 3 (ANCA)</li> <li>• Interferon-<math>\alpha/\beta</math> receptor 1</li> <li>• Interferon-<math>\alpha/\beta</math> receptor 2</li> <li>• Platelet antigens (GPIIb)</li> <li>• Platelet antigens (GPIIIa)</li> <li>• RNA Polymerase III</li> <li>• Scleroderma-specific antibodies (Scl-70)</li> <li>• Centromere protein A (CENP-A)</li> <li>• Centromere protein B (CENP-B)</li> </ul>

ML-26-006