

Parathyroid

● Hypoparathyroid

- Anti parathyroid Abs
- Anti calcium sending receptor Abs (CaSR)



Nervous system

● Myasthenia

- [Anti acetylcholine receptor Abs](#)
- [Anti MuSK Abs](#)
- Anti striated muscle Abs
- Anti titin Abs

● Lambert Eaton syndrome

- [Anti calcium channel Abs \(VGCC\)](#)

● Isaac syndrome

- [Anti potassium channel Abs \(VGKC\)](#)

● Stiffman syndrome

- [Anti glutamate decarboxylase Abs 67 = GAD 1](#)
- [Anti amphiphysin Abs](#)

● Peripheral neuropathies

- Anti myelin Abs
- Anti MAG Abs
- Anti sulfatide Abs
- Anti gangliosides Abs
- IgG/IgM (GM1, GM2, GD1a, GD1b, GD3, GT1b, GQ1b...)

● Devic disease

- [Anti neuromyelitis optica Abs \(NMO\)](#)

● Paraneoplastic syndromes

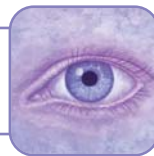
- [Anti neuronal Abs: Hu, Ri, Yo, amphiphysin, CV2, Ma1, Ma2](#)



Eye

● Retinitis, keratitis, Uvetitis

- Anti retina, cornea, crystallin Abs



Inner ear

● Cogan syndrome

- Anti cochlea Abs

● Meniere disease

- Anti collagen type II Abs



Contact

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Focus on...

Autoantibodies in the diagnosis and monitoring of auto immune disease

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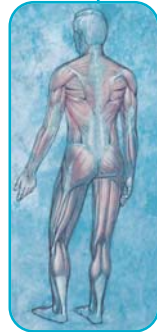
Description

- **Auto-antibodies that are underlined are of significant diagnostic value**
- *Auto antibodies written in italic are of low diagnostic value*
- **All of these tests are performed routinely**
- **Abs = Antibodies**

Systemic disorders

- **Disseminated Lupus Erythematosus (DLE)**
 - Anti nuclear Abs
 - Anti ds DNA Abs
 - Anti nucleosome Abs
 - Anti ENA Abs (Sm, RNP, SSA)
 - Anti ribosomal Abs
 - Anti C1q Abs
 - *Circulating immune complexes*
- **Drug induced Lupus**
 - Anti nuclear Abs
 - Anti histone Abs
 - Anti ss DNA Abs
- **Gougerot-Sjögren syndrome**
 - Anti nuclear Abs
 - Anti SSA – SSB Abs

NB : Anti salivary gland Abs are not of diagnostic interest
- **Mixed connective tissue disease**
 - Anti nuclear Abs
 - Anti RNP Abs
- **Myositis, anti-synthetase Syndrome**
 - Anti nuclear Abs
 - Anti Jo1 Abs
 - Anti PL7, PL 12, Ku, Mi2 Abs
 - Anti SRP Abs
 - Anti Pm/Scl Abs
- **Systemic Sclerodera**
 - Anti nucleoli Abs
 - Anti Scl70 Abs = topoisomerase
 - Anti Pm/Scl Abs
- **CREST Syndrome**
 - Anti centromere Abs
- **Antiphospholipid syndrome**
 - Anti cardiolipin Abs IgG/IgM
 - Lupus anticoagulant
 - Anti B2 glycoprotein 1 Abs IgG/IgM
 - *Anti phosphatidylethanolamine Abs IgG/IgM*
 - *Anti phosphatidylserine Abs IgG*
 - *Anti prothrombin Abs IgG*
 - *Anti annexin V Abs IgG*
- **Rheumatoid Polyarthrits**
 - Anti rheumatoid factors Abs IgM
 - *Anti rheumatoid factor Abs IgA*
 - Anti citrullinated peptides Abs
 - *Anti keratin Abs*



Liver

- **Primary biliary cirrhosis**
 - Anti mitochondrial type 2 Abs
 - anti-pyruvate deshydrogenase = PDH
 - Anti gp 210 Abs (Nuclear pores)
 - *Anti SP100 (nuclear dots)*
- **Type 1 Autoimmune Hepatitis**
 - Anti smooth muscle Abs
 - Anti actin Abs
 - Anti soluble liver Abs antigen = SLA/LP
- **Type 2 Autoimmune Hepatitis**
 - Anti endoplasmic reticulum Abs = anti liver/kidney microsome Abs = anti LKM type 1 anti-cytochrome P450 II D6
 - Anti cytosol Abs = anti-LC1 Abs
- **Primary sclerosing cholangitis**
 - Anti polynuclear neutrophil cytoplasm Abs, type X or pANCA



Stomach

- **Type A Gastritis, Biermer Anemia**
 - Anti intrinsic factor Abs
 - Anti parietal cell Abs
 - Anti H+K+ ATPase Abs



Pancreas

- **Insulin dependent diabetes**
 - Anti Langerhans cell Abs
 - Anti glutamatedecarboxylase Abs 65 = GAD II
 - Anti tyrosinephosphatase Abs = IA2
- **Autoimmune Pancreatitis**
 - Anti insulin Abs
 - Anti lactoferrin Abs + carbonic anhydrase



Intestine

- **Coeliac disease = gluten intolerance**
 - Anti transglutaminase Abs IgA/IgG
 - Anti endomysium Abs IgA/IgG
 - *Anti gliadin Abs IgA/IgG*
 - *Anti reticulin Abs IgA*
- **Crohn disease**
 - Anti saccharomyces cerevisiae Abs IgA/IgG = ASCA
- **Haemorrhagic rectocolitis**
 - Anti polynuclear neutrophil cytoplasm Abs, type X or pANCA



Adrenal, Ovaries

- **Addison disease**
 - Anti cortico-adrenal Abs
 - Anti 21 hydroxylase Abs
- **Premature Menopause Hypofertility**
 - Anti testicular Abs
 - Anti ovary Abs



Thyroid

- **Basedow disease**
 - Anti TSH receptor Abs = TSI = LATS = TRAK
- **Hashimoto Thyroiditis Primary Myxoedema**
 - Anti thyroperoxydase Abs = TPO
 - Anti thyroglobulin Abs = Tg



NB : anti microsomes thyroid Abs have been replaced by anti TPO Abs

Skin

- **Pemphigus**
 - Anti intracellular substance Abs = desmosomes
 - Anti desmoglein 1+3 Abs
- **Bullous pemphigoid**
 - Anti epidermal basal membrane Abs
 - Anti BP180 Abs
- **Herpes gestationis**
- **Herpetiform dermatitis**
 - Anti *IgG/IgA* transglutaminase Abs
 - Anti endomysium Abs IgA/IgG
- **Sub acute cutaneous lupus**
 - Anti SSA Abs



Cartilage

- **Polychondritis**
 - Anti collagen type II Abs



Kidney, lung

- **Goodpasture syndrome**
 - Anti glomerular basement membrane Abs
- **Wegener disease**
 - Anti neutrophil cytoplasmic Abs – ANCA proteinase 3 - anti-Abs = PR3
- **Microscopic Polyangiitis extra capillary glomerulonephritis**
 - Anti neutrophil cytoplasmic Abs – ANCA anti-myeloperoxidase Abs = MPO



NB: Anti elastase Abs, cathepsin, lactoferrin, BPI have no diagnostic interest