

# Biophysical250

## Biophysical250 Panel

### Autoimmune Evaluation

Anti-Nuclear Antibody  
CRP (C Reactive Protein)  
ds DNA Antibody (Double stranded DNA Antibody)  
Ferritin  
Haptoglobin  
RF (Rheumatoid Factor)  
Beta 2-glycoprotein Antibody  
Centromere protein B Antibody  
Collagen type 6 Antibody  
Complement Factor C1q Antibody  
Histone Antibody  
Histone H1 Antibody  
Histone H2A Antibody  
Histone H2B Antibody  
Histone H3 Antibody  
Histone H4 Antibody  
Jo-1 Antibody  
Myeloperoxidase Antibody  
PCNA Antibody (Proliferating Cell Nuclear Antigen Antibody)  
Pm1 Antibody (Polymyositis Antibody)  
PR3 Antibody (Proteinase 3 Antibody)  
RNP Antibody (Ribosomal Nuclear Protein Antibody)  
RNP A Antibody (Ribosomal Nuclear Protein A Antibody)  
RNP C Antibody (Ribosomal Nuclear Protein C Antibody)  
Ribosomal P Antibody  
Scl-70 Antibody (Scleroderma 70 Antibody)  
Smith Antibody  
SSA Antibody  
SSB Antibody

### Cancer Evaluation

Basophil Count  
Basophil Percentage  
Beta-2-Microglobulin  
CA 125 (Cancer Antigen 125)  
Carcinoembryonic Antigen  
DHEA sulphate (Dihydroepiandrosterone Sulfate)  
Eosinophil Count  
Eosinophil Percentage  
EPO (Erythropoietin)  
FSH (Follicle Stimulating Hormone)  
Globulin (Calculated)  
Growth Hormone  
Haptoglobin  
Helicobacter pylori Antibody  
Hematocrit  
Hemoglobin  
Hepatitis C Antibody  
hCG (Human Chorionic Gonadotropin)  
IgA (Immunoglobulin A)  
IgM (Immunoglobulin M)  
Insulin  
LDH (Lactic Dehydrogenase)  
LH (Luteinizing Hormone)  
Lymphocyte Count  
Lymphocyte Percentage  
Monocyte Count  
Monocyte Percentage  
Neutrophil Count  
Neutrophil Percentage  
Platelets

Prolactin  
PSA, free (Prostate-Specific Antigen, free)  
PSA, total (Prostate-Specific Antigen, total)  
Testosterone  
Total Protein  
WBC (White Blood Cell Count)  
AFP (Alpha Fetoprotein)  
Calcitonin  
BR-MA (CA 15-3, Cancer Antigen 15-3)  
CA 19-9 (Cancer Antigen 19-9)  
Endothelin 1  
Factor VII  
Gastrin  
GST (Glutathione S-Transferase)  
Human Papilloma Virus Antibody  
Prostatic Acid Phosphatase

### Cardiovascular Evaluation

CRP (C Reactive Protein)  
Cholesterol, Total  
CKMB (Creatine Kinase MB)  
CK Total (Creatine Kinase, Total)  
Ferritin  
Fibrinogen  
Haptoglobin  
HDL (High Density Lipoprotein)  
Homocysteine  
LDL (Low Density Lipoprotein)  
LDL/HDL Ratio  
Triglycerides  
vWF (von Willebrand Factor)  
APO A1 (Apolipoprotein A1)  
B-type Natriuretic Peptide  
Endothelin 1  
Lipoprotein (a)  
Myeloperoxidase Antibody  
Myoglobin  
Plasminogen Activator Inhibitor  
PCNA Antibody (Proliferating Cell Nuclear Antigen Antibody)  
PR3 Antibody (Proteinase 3 Antibody)  
APO CIII (Apolipoprotein CIII)  
APO H (Apolipoprotein H)  
Fatty Acid Binding Protein  
Heat Shock Cognate Protein 70 Antibody  
HSP 32 Antibody (Heat Shock Protein 32 Antibody)  
HSP 65 Antibody (Heat Shock Protein 65 Antibody)  
HSP 71 Antibody (Heat Shock Protein 71 Antibody)  
HSP 90 alpha Antibody (Heat Shock Protein 90 alpha Antibody)  
HSP 90 beta Antibody (Heat Shock Protein 90 beta Antibody)  
PAPP-A (Pregnancy-associated plasma protein A)

### Cell Signalling Evaluation

BDNF (Brain-Derived Neurotrophic Factor)  
Eotaxin  
EGF (Epidermal Growth Factor)  
FGF basic (Fibroblast Growth Factor-basic form)  
GM-CSF (Granulocyte Macrophage Colony Stimulating Factor)  
IGF Binding partner 3 (Insulin-Like Growth Factor Binding Partner 3)  
IGF-1 (Insulin-Like Growth Factor 1)  
ICAM-1 (Intercellular Adhesion Molecule 1)  
IL-1 alpha (Interleukin 1 alpha)

### Cell Signalling Evaluation (cont)

IL-1 beta (Interleukin 1 beta)  
IL-2 (Interleukin 2)  
IL-3 (Interleukin 3)  
IL-4 (Interleukin 4)  
IL-5 (Interleukin 5)  
IL-6 (Interleukin 6)  
IL-7 (Interleukin 7)  
IL-8 (Interleukin 8)  
IL-10 (Interleukin 10)  
IL-12p40 (Interleukin 12p40)  
IL-12p70 (Interleukin 12p70)  
IL-13 (Interleukin 13)  
IL-15 (Interleukin 15)  
IL-16 (Interleukin 16)  
IL-18 (Interleukin 18)  
Lymphotactin  
MDC (Macrophage-Derived Chemokine)  
MIP 1 alpha (Macrophage Inflammatory Protein 1 alpha)  
MIP 1 beta (Macrophage Inflammatory Protein 1 beta)  
MMP-2 (Matrix Metalloproteinase 2)  
MMP-3 (Matrix Metalloproteinase 3)  
MMP-9 (Matrix Metalloproteinase 9)  
MCP-1 (Monocyte Chemotactic Protein 1)  
RANTES (Regulated Upon Activation, Normal T-cell Expressed and Secreted)  
SCF (Stem Cell Factor)  
TIMP-1 (Tissue Inhibitor of Metalloproteinase 1)  
TNF-alpha (Tumor Necrosis Factor alpha)  
TNF-beta (Tumor Necrosis Factor beta)  
TNF RII (TNF Receptor II)  
VCAM 1 (Vascular Cell Adhesion Molecule 1)  
VEGF (Vascular Endothelium Growth Factor)

### Diabetes Evaluation

Glucose  
Insulin  
Insulin Antibody  
C-peptide  
Hemoglobin A1c  
Leptin  
Pancreatic islet cell Antibody  
Adiponectin  
Insulin-like Growth Factor binding partner 3  
IGF-1 (Insulin-like Growth Factor 1)

### Endocrine Systems Evaluation

#### Pituitary/Adrenal

Cortisol  
FSH (Follicle Stimulating Hormone)  
Growth Hormone  
LH (Luteinizing Hormone)  
Prolactin  
TSH (Thyroid Stimulating Hormone)

#### Thyroid/Parathyroid

Calcium  
PTH (Parathyroid Hormone)  
Phosphorus  
Thyroglobulin Antibody  
Thyroid Microsomal Antibody  
TSH (Thyroid Stimulating Hormone)  
T4 (Thyroxine)  
TBG (Thyroxine Binding Globulin)  
T3 (Triiodothyronine)

Calcitonin  
Thyroglobulin Antigen  
T4 Antibody (Thyroxine Antibody)  
T3 Antibody (Triiodothyronine Antibody)

#### Sex hormones

DHEA sulfate (Dihydroepiandrosterone sulfate)  
Estradiol  
FSH (Follicle Stimulating Hormone)  
LH (Luteinizing Hormone)  
Progesterone  
Prolactin  
Testosterone  
Androstenedione  
Estril  
SHBG (Sex Hormone-Binding Globulin)

### Hematology Evaluation

Bilirubin, total  
Eosinophil Count  
Eosinophil Percentage  
EPO (Erythropoietin)  
Ferritin  
Fibrinogen  
Hematocrit  
Hemoglobin  
Iron Binding Capacity, Total  
Iron, serum  
LDH (Lactic Dehydrogenase)  
Lymphocyte Count  
Lymphocyte Percentage  
MCH (Mean Corpuscular Hemoglobin)  
MCHC (Mean Corpuscular Hemoglobin Concentration)  
MCV (Mean Corpuscular Volume)  
Monocyte Count  
Monocyte Percentage  
Neutrophil Count  
Neutrophil Percentage  
Platelet Count  
RBC Count (Red Blood Cell Count)  
RDW (Red Cell Distribution Width)  
Vitamin B12  
WBC Count (White Blood Cell Count)  
Basophil Count  
Basophil Percentage  
Factor VII  
Haptoglobin  
TPO (Thrombopoietin)  
Tissue Factor  
vWF (von Willebrand Factor)

### Immune Systems/ Inflammation

AST Antigen (Aspartate Aminotransferase Antigen, also called SGOT)  
CRP (C Reactive Protein)  
Haptoglobin  
IgA (Immunoglobulin A)  
IgE (Immunoglobulin E)  
IgM (Immunoglobulin M)  
vWF (von Willebrand Factor)  
Factor VII  
Alpha 2 Macroglobulin  
Complement 3  
ENA 78 (Epithelial Neutrophil Activating Peptide 78)  
Heat Shock Cognate Protein 70 Antibody

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### Immune Systems/ Inflammation (cont)

HSP 32 Antibody (Heat Shock Protein 32 Antibody)  
HSP 65 Antibody (Heat Shock Protein 65 Antibody)  
HSP 71 Antibody (Heat Shock Protein 71 Antibody)  
HSP 90 alpha Antibody (Heat Shock Protein 90 alpha Antibody)  
HSP 90 beta Antibody (Heat Shock Protein 90 beta Antibody)  
SAP (Serum Amyloid P)

### Infectious Disease Evaluation

#### Bacterial/Parasitic Exposure

Helicobacter pylori Antibody  
Mycoplasma pneumoniae Antibody  
Streptolysin O Antibody  
Bordetella pertussis Antibody  
Campylobacter jejuni Antibody  
Chlamydia pneumoniae Antibody  
Chlamydia trachomatis Antibody  
Diphtheria Toxin Antibody  
Leishmania donovani Antibody  
Lyme Disease Antibody  
Mycobacteria tuberculosis Antibody  
Tetanus Antibody  
Toxoplasma Antibody  
Trypanosoma cruzi Antibody

#### Viral Exposure

Cytomegalovirus Antibody  
Epstein-Barr Virus EA Antibody  
Hepatitis A Antibody  
Hepatitis B Core Antibody  
Hepatitis B Core e Antibody  
Hepatitis B Surface Antibody  
Hepatitis B Surface Antigen  
Hepatitis C Antibody  
Hepatitis D Antibody  
HEV orf 2.3kD Antibody  
HEV orf 2.6kD Antibody  
HEV orf 3.3kD Antibody  
Influenza A H3N2 Antibody  
Rubella Antibody  
Rubeola Antibody  
Varicella zoster IgG Antibody  
Varicella zoster IgM Antibody  
Adenovirus Antibody  
Herpes Simplex Virus type 1 group D Antibody  
Herpes Simplex Virus type 2 group G Antibody  
Herpes Simplex Virus type 1 and 2 Antibodies  
Human Papilloma Virus Antibody  
HTLV-1/2 Antibody (Human T-cell Lymphotropic Virus type 1 and 2 Antibody)  
Influenza type A Antibody  
Influenza type B Antibody  
Mumps Antibody  
Parainfluenza type 1 Antibody  
Parainfluenza type 2 Antibody  
Parainfluenza type 3 Antibody  
Polio Antibody  
RSV Antibody (Respiratory Syncytial Virus)  
Epstein-Barr Virus NA Antibody  
Epstein-Barr Virus VCA Antibody

### Nutritional Evaluation

Albumin  
Albumin/Globulin Ratio

Amylase  
Calcium  
Carbon Dioxide  
Chloride  
Cholesterol, Total  
Ferritin  
Folic acid  
Globulin  
Glucose  
Hematocrit  
Hemoglobin  
Iron Binding Capacity, Total  
Iron Binding Capacity, Unsaturated  
Iron, Percent Saturated  
Iron, serum  
Magnesium  
MCH (Mean Corpuscular Hemoglobin)  
MCHC (Mean Corpuscular Hemoglobin Concentration)  
Phosphorus  
Potassium  
Sodium  
Total Protein  
Triglycerides  
Uric acid  
Vitamin B12

### Organ Systems Evaluation

#### Gastrointestinal

Helicobacter pylori Antibody  
Campylobacter jejuni Antibody  
ASCA (anti-Saccharomyces cerevisiae antibodies)  
Gastrin  
tTG Antibody (tissue Transglutaminase Antibody)

#### Kidney

BUN (Blood Urea Nitrogen)  
BUN/Creatinine Ratio  
CO2 (Carbon Dioxide)  
Chloride  
Creatinine  
Potassium  
Sodium  
Uric acid  
Beta 2-Microglobulin

#### Liver

ALT (Alanine Aminotransferase)  
ALP (Alkaline Phosphatase)  
AST (Aspartate Aminotransferase, also called SGOT)  
Bilirubin, total  
Ferritin  
Fibrinogen  
GGT (Gamma Glutamyl Transferase)  
Haptoglobin  
Hepatitis A Antibody  
Hepatitis B Core Antibody  
Hepatitis B e Antibody  
Hepatitis B Surface Antibody  
Hepatitis B Surface Antigen  
Hepatitis C Antibody  
Hepatitis D Antibody  
HEV orf 2.3kD Antibody  
HEV orf 2.6kD Antibody  
HEV orf 3.3kD Antibody  
TIBC (Iron binding capacity, total)  
LDH (Lactic Dehydrogenase)

### Organ Systems Evaluation *Liver (cont)*

Alpha-1 Antitrypsin  
Cytochrome p450 Antibody  
GST (Glutathione S-Transferase)  
Mitochondrial Antibody

### Osteoarthritis Evaluation

CRP (C Reactive Protein)  
Ferritin  
Haptoglobin  
RF (Rheumatoid Factor)  
vWF (von Willebrand Factor)  
Anti-Nuclear Antibody  
Collagen type 1 Antibody  
Collagen type 2 Antibody  
Collagen type 4 Antibody  
Collagen type 6 Antibody  
Heat Shock Cognate Protein 70 Antibody  
HSP 32 Antibody (Heat Shock Protein 32 Antibody)  
HSP 65 Antibody (Heat Shock Protein 65 Antibody)  
HSP 71 Antibody (Heat Shock Protein 71 Antibody)  
HSP 90 alpha Antibody (Heat Shock Protein 90 alpha Antibody)  
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