

# *Reflex Testing*

The following ordered tests will have reflex tests performed under conditions listed unless otherwise requested by the ordering physician.

## **Reflex Tests Performed at Decatur Morgan Reference Laboratory:**

<b>Ordered Test</b>	<b>Reflex Test</b>	<b>Rules for Test Addition</b>
Antistreptolysin-O Screen	ASO titer	ASO is positive
Platelet Function Analysis	Collagen/ADP	If collagen/epinephrine is >172
Rapid Plasma Reagin (RPR)	RPR titer	If RPR is reactive
Creatine Kinase (CK) Profile	CKMB	If CK is - Males: >204 units Females: >173 units
CBC with Differential	Manual differential	Abnormal RBC, WBC, platelet results or electronic differential
Urinalysis with Possible Reflex Culture	Urine Culture	Abnormal results on urine dipstick or urine microscopic
Culture	Organism identification/ sensitivity	Pathogenic growth
Direct Strep	Throat Culture	If Direct Strep is negative
Antibody Screen	Antibody identification	Antibody screen is positive
Cold Agglutinins Screen	Cold Agglutinins Titer	If Cold Agglutinins Screen is positive

## **Reflex Tests Sent to Huntsville Hospital or Mayo Medical Laboratories:**

<b>Ordered Test</b>	<b>Reflex Test</b>	<b>Rules for Test Addition</b>
Hepatitis B Surface Antigen	Hepatitis B Surface Antigen Confirmation	If hepatitis B surface antigen is reactive
Hepatitis C Antibody	HCV by PCR	If hepatitis C is reactive
Hepatitis Profile	HCV by PCR	If hepatitis C is reactive
Protein Electrophoresis	Immunoelectrophoresis	If the pathologist reviewing the electrophoresis finds abnormality in the pattern
HIV Ab	HIV, Western Blot	If HIV antibody is reactive
Alpha-1-Antitrypsin Proteotype, Serum	Alpha-1-Antitrypsin Phenotype	If the mass spectrometry proteotype and quantitative serum levels are discordant

## Reflex Testing (Cont.)

Antibodies to Extractable Nuclear Antigens Evaluation	Jo 1, Scl 70, Sm, SS-A/Ro, SS-B/La, and U1RNP	If extractable nuclear antigen result is borderline positive or positive
Antineutrophil Cytoplasmic Antibodies Vasculitis Panel	Cytoplasmic Neutrophilic Ab	If myeloperoxidase antibody or proteinase 3 antibody is $\geq 4.0$ U
Anti-MAG	MAG EIA Reflex	If Anti-MAG is positive
Brucella Antibody Screen, IgG & IgM, Serum	Brucella Ab, Agglutination	If Brucella antibody screen IgG & IgM is positive or equivocal
Celiac Disease Serology Cascade	Tissue transglutaminase ab IgA (tTG IgA)  Endomysial antibodies IgA  Deamidated gliadin ab IgA  Tissue transglutaminase ab IgG (tTG IgA)  Deamidated gliadin ab IgG	If IgA is age-specified normal or IgA is $>$ or $= 1.0$ mg/dL, but lower than age-specified normal  If tTG IgA is equivocal  If tTG IgA is equivocal or IgA is $>$ or $= 1.0$ mg/dL, but lower than age-specified normal  If IgA is $>$ or $= 1.0$ mg/dL, but lower than age-specified normal or IgA is below detection ( $< 1.0$ mg/dL)  If IgA is $>$ or $= 1.0$ mg/dL, but lower than age-specified normal or IgA is below detection ( $< 1.0$ mg/dL)
Coccidioides Antibody, Serum	Coccidioides Ab by complement fixation and immunodiffusion	If Coccidioides screen is positive
C2 Complement, Functional	C3 & C4 Complement & C2 Complement antigen	If C2 result is $< 15$ U/mL
Connective Tissue Diseases Cascade	Antibodies to double-stranded DNA (dsDNA), extractable nuclear antigen evaluation, ribosome P, and centromere  Double-stranded DNA Ab by Crithidia IFA	If antinuclear antibodies are $>$ or $= 3.0$ U  If dsDNA is borderline
Cryoglobulin and Cryofibrinogen Panel	Immunofixation Cryoglobulin	If cryoglobulin has a result other than negative
Hepatitis B Profile	Hepatitis B Surface antigen confirmation	If hepatitis B surface antigen has a signal-to-cutoff ratio (S/CO) of $<$ or $= 50.0$
Hepatitis E Virus IgM Screen	Hepatitis E IgM Ab Confirmation	If hepatitis E virus IgM antibody screen is reactive or borderline

## Reflex Testing (Cont.)

Herpes Simplex Virus Type 1- & Type 2- specific Ab	Herpes simplex virus antibody IgM by IFA	If herpes simplex virus antibody screen is reactive
Hemoglobin Electrophoresis Cascade	Hemoglobin F Red Cell Distribution Unstable Hemoglobin Hemoglobin S Screen IEF Confirms Hb Variant by MS Hemoglobin Electrophoresis Molecular	May include any or all of these to identify rare hemoglobin variants.
Human T-Cell Lymphotropic Viruses Types 1 & 2 Ab Screen	Human T-cell lymphotropic I/II antibody confirmation	If HTLV I/II antibody by EIA is reactive
Infliximab Quantitation	Infliximab Antibody	If Infliximab level is below 5.1 mcg/mL
Lyme Disease Serology	Lyme disease antibody confirmation	If Lyme disease serology is positive
Drugs of Abuse Screen, Meconium	Amphetamines confirmation Cocaine and metabolites confirmation Opiates confirmation PCP confirmation Carboxy-THC confirmation	If the screen is positive
Mycoplasma IgG & IgM Ab	Mycoplasma antibody IgM by IFA	If Mycoplasma pneumonia IgM is positive or equivocal
Alpha-1-Antitrypsin Proteotype	Alpha-1-Antitrypsin Phenotype	If the mass spectrometry proteotype and quantitative serum level are discordant
Blastomyces Antibody by EIA	Blastomyces Antibody, Immunodiffusion	If result is equivocal or positive
Hepatitis C Virus Genotype	HCV Genotype Resolution	If specific subtype cannot be assigned

## Reflex Testing (Cont.)

Paraneoplastic Antibody Evaluation	<p>GAD65 antibody assay Paraneoplastic autoantibody Western Blot</p> <p>CRMP-5-IgG Western Blot</p> <p>ACh Receptor (Muscle) Modulating antibody</p> <p>Amphiphysin Western Blot</p> <p>NMDA-R antibody CBA and/or IF titer</p> <p>AMPA-R antibody CBA and/or IF titer</p> <p>GABA-B-R antibody CBA and/or IF titer</p> <p>NMO/AQP4-IgG CBA</p>	<p>If IFA pattern suggest GAD65 antibody If IFA (ANN1S, ANN2S, ANN3S, PCABP, PCAB2, PCATR, AMPHS, CRMS, AGN1S) patterns are indeterminate</p> <p>If client requests or if IFA pattern suggest CRMP-5-IgG</p> <p>If ACh receptor binding antibody is &gt;0.02</p> <p>If IFA patterns suggest amphiphysin antibody</p> <p>If IFA pattern suggest NMDA-R</p> <p>If IFA pattern suggest AMPA-R</p> <p>If IFA pattern suggest GABA-B-R</p> <p>If IFA pattern suggest NMO/AQP4-IgG</p>
Protein S Antigen, Free	Protein S antigen, total	If protein S antigen free is abnormal
Syphilis IgG Antibody	RPR w/reflex	If syphilis IgG is positive
von Willebrand Factor Antigen	Ristocetin Cofactor	If von Willebrand factor activity is <55%