Lab Dept:	**Transfusion Services**
Test Name:	**PLATELET ASSOCIATED ANTIBODY**

General Information

Lab Order Codes:	PLTA
Synonyms:	Platelet Associated Antibody IgG/IgM; Platelet Associated Autoantibody; Cell-Bound Platelet Autoantibody Solid Phase
CPT Codes:	86023 – Antibody identification, platelet associated immunoglobulin assay
Test Includes:	Test results reported as positive or negative. If positive, glycoprotein specificity will be identified.

Logistics

Test Indications:	Diagnosis of: Idiopathic (autoimmune) thrombocytopenia purpura (ITP), Immune thrombocytopenia associated with systemic lupus erythematosus or other disorders associated with autoimmune phenomena. Additional recommended testing for ITP: Platelet Antibody
Lab Testing Sections:	Transfusion Service - Sendouts
Referred to:	Mayo Medical Laboratories (MML Test: CBPAN)
Phone Numbers:	MIN Lab: 612-813-6820 STP Lab: 651-220-6550
Test Availability:	See Special Intructions
Turnaround Time:	2 - 4 days, test performed Monday - Saturday
Special Instructions:	**Restricted draw times**. Draw specimens Monday – Thursday only and not the day before a holiday. The patient must have a platelet count above 10,000 mm^3. The specimen must not be frozen.

Specimen

Specimen Type:	Whole blood
Container:	Lavender top (EDTA) tube

Draw Volume:	20 mL (Minimum: Adults -10 mL/Peds – 5 mL) whole blood
Collection:	All specimens submitted must be appropriately labeled at the bedside with the time and date of collection, and the signature of the individual collecting the specimen. A completed order, either through the HIS or general requisition must accompany each specimen.
Special Processing:	Lab Staff: **Do Not** centrifuge. Specimen must arrive at Mayo within 48 hours of collection. Specimen should be drawn and packaged as close to shipping time as possible. Store and ship at room temperature. Verify platelet count is greater than 10,000 mm^3. Forward promptly.
Patient Preparation:	The patient must be positively identified when the specimen is collected. The label on the blood specimen must correspond with the identification on the patient's Medical Record wrist or ankle band and on the physician's/practitioner's orders.
Sample Rejection:	Specimen tube not properly labeled, specimen other than whole blood platelet-rich plasma collected in EDTA; mislabeled or unlabeled specimens; specimens older than 48 hours

Interpretive

Reference Range:	An interpretive report will be provided. Note: A positive test, particularly to GP IIB/IIIa or Ib/IX, in the presence of thrombocytopenia (not explained by other findings) is consistent with idiopathic (autoimmune) thrombocytopenic purpura. Similarly, a positive test in a thrombocytopenic patient with systemic lupus erythematosus is consistent with an autoimmune cause. Patients who are septic may also have a positive test with reactivity against most glycoproteins. Presence of reactivity to some glycoproteins has no clearly established clinical significance. Borderline positive results need to be interpreted in the right clinical context.

Limitations:

Erroneous results can occur from bacterial contamination of test materials, inadequate incubation periods, inadequate washing or decanting of test wells, exposure of substrate to stray light, omission of test reagents, exposure to higher or lower than prescribed temperature requirements, insufficient or excessive platelets, or omission of steps.

The presence of immune complexes or other immunologlobulin aggregates in the patient sample may cause an increased nonspecific binding and produce false-positives in this assay.

Some low-titer, low-avidity antibodies may not be detected using this assay.

The results of this assay should not be used as the sole basis for a clinical decision. This test is intended to be used as a screening test. The results of this assay should not be used as the sole basis for a clinical decision. This test is intended to be used as a screening test. The reaction patterns a test sample produces with this product should not be relied on solely to establish the identity of a platelet antibody. Therefore, positive or negative results obtained using this assay should be used in conjunction with clinical findings or other serological tests.

This product is specifically designed to detect autoantibodies eluted from patient's platelets. Therefore, a positive reaction obtained only with patient serum or plasma does not necessarily indicate the presence of autoantibody. Platelet-specific alloantibodies may also be reactive using this assay.

The PAKAuto assay is designed to detect autoantibodies reactive with platelet glycoproteins IIb/IIIa, Ib/IX, and Ia/IIa. Autoantibodies to other platelet proteins are not expected to react in this assay.

It is possible that an autoantibody could give a false-negative result in this assay due to steric hindrance of the human autoantibodies by the murine monoclonal antibodies used to capture the platelet glycoprotein.

Methodology:

Solid Phase Enzyme Linked Immunoassay (ELISA)

References:

Mayo Medical Laboratory Web Page September 2016

Updates:

4/22/2004: Test moved from American Red Cross-North Central Blood Services (NCBS), Platelet Serology Laboratory to Mayo Medical Laboratories.
9/6/2011: Added restricted draw time information.
9/24/2013: Updated collect volumes
2/2/2016: CPT update
9/1/2016:Method update, transport temp change