

Drug-Dependent Platelet Antibody

Versiti offers flow cytometric detection of Drug-Dependent Platelet Antibodies.

Following exposure to certain drugs, acute severe thrombocytopenia can occur due to the formation of antibodies that react with platelets in the presence of drug. We have detected IgG and/or IgM antibodies induced by the following drugs:

Abciximab (ReoPro™)	Propoxyphene
Carbamazepine	Quinidine
Ceftazidime	Quinine
Ceftizoxime	Ranitidine
Ceftriaxone	Rifampin
Eptifibatide (Integrelin™)	Sulfamethoxazole
Fentanyl	Sulfisoxazole
Ibuprofen	Suramin
Loracarbef	Tirofiban (Aggrastat™)
Naproxen Glc	Trimethoprim
Orbofiban	Vancomycin
Phenytoin	Xemilofiban

Testing for other drugs is available.

Indications for testing:

Evaluation of patients who develop thrombocytopenia after exposure to certain drugs is an important component of clinical evaluation.

Test method:

Immunofluorescence by flow cytometry. Flow cytometry is the most sensitive method available for detection of drug-dependent platelet antibodies. Patient serum is

incubated with normal group O target platelets in both the presence and absence of drug and bound immunoglobulin is detected. Fluorescence values obtained in the presence and absence of drug are compared.

Assay sensitivity and limitations:

Only serum or citrated plasma is accepted for testing. Positive test results are not absolutely diagnostic of drug-induced thrombocytopenia and must be used in combination with clinical information to make a diagnosis. Negative results do not completely rule out a diagnosis of drug-induced immune thrombocytopenia.

Reporting of results:

No drug-dependent platelet antibodies detected. (Fluorescence Ratio < 2.0).

Specimen requirements:

5 ml serum or citrated plasma (the minimum sample volume is 1 ml). Samples may be refrigerated or frozen .



SHIP

Shipping requirements:

Ship on an ice pack. Place the sample and completed test requisition form into plastic bags and seal. Place in an insulated container, then into a sturdy cardboard box, tape securely and ship by an overnight carrier. Ship the package in compliance with your overnight carrier guidelines.

Label "Refrigerated Sample" and ship to:

Versiti Client Services
Platelet and Neutrophil Immunology Laboratory
638 N. 18th Street
Milwaukee, WI 53233
800-245-3117, ext. 6250



ORDER

Required forms:

Please complete all pages of the requisition form.

CPT Codes/Billing/Turnaround time:

Test code: 9000

CPT codes: For recommended CPT codes, visit the [versiti.org/test-catalog](https://www.versiti.org/test-catalog)

Turnaround time: 3-4 days

References:

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3. Bednar B, et al. Drug-dependent antibodies against glycoprotein IIb/IIIa induce thrombocytopenia [abstract]. *Circulation* 94 (suppl. I):99, 1996.
4. Curtis BR, McFarland JG, Garrity MM, Aster RH. Thrombocytopenia induced by abciximab: studies of pathogenesis [abstract]. *Blood* (suppl. 1):92, 1998.
5. Gentilini G, Curtis BR, Aster RH. An antibody from a patient with ranitidine-induced thrombocytopenia recognizes a site on glycoprotein IX that is a favored target for drug-induced antibodies. *Blood* 92:2359-2365, 1998.
6. Joseph T, Marco J, Gregorin L. Acute profound thrombocytopenia after abciximab therapy during coronary angioplasty. *Clin Card* 21:851-852, 1998.
7. Brassard JA, Cooper RA, Kupfer SR, Komocsar WJ, Curtis BR, Kane MD, Aster RH. Acute Thrombocytopenia after treatment with the oral fibrinogen receptor antagonist
8. Gawaz M, Neumann FJ, Schomig A. Evaluation of platelet membrane glycoproteins in coronary artery disease. *Circulation* 99: 1-11, 1999.
9. Curtis BR, Swyers J, Divgi A, McFarland JG, Aster RH. Thrombocytopenia after second exposure to abciximab is caused by antibodies that recognize abciximab-coated platelets. *Blood* 99: 2054-2059, 2002.
10. Von Drygalski A, Curtis BR, Bougie DW, Mcfarland JG, Ahl S, Limbu I, Baker KR, Aster RH. Vancomycin-induced immune thrombocytopenia. *N Engl J Med* 356: 904-910, 2007.