

Designed to detect Heparin-Associated PF4 Antibodies of the IgG Type

GENERAL INFORMATION

Patients receiving heparin treatment for at least a week often develop thrombocytopenia.^{1,2,3} In some cases the platelet levels are reduced only slightly and return to normal even when heparin treatment is continued. This type of thrombocytopenia is termed "Type I" heparin-induced thrombocytopenia (HIT), is not antibody-mediated and PF4 heparin-dependent antibodies are not detected.²

In other patients, thrombocytopenia is usually more severe and is antibody-mediated and PF4 heparin-dependent antibodies are detected. This condition is designated "Type II" HIT. Type I HIT is generally considered to be a benign condition, whereas patients with Type II HIT are at risk to develop more severe thrombocytopenia as well as arterial or venous thrombosis if heparin therapy is continued.²

Antibodies associated with Type II HIT recognize sites on "platelet factor 4" (PF4) that are created when PF4 is complexed with heparin or another linear polyanionic compound such as polyvinyl sulfonate (PVS).^{4,5,6,7}

While the diagnosis of HIT is primarily based on clinical finding, the laboratory detection of heparin-associated antibodies is important in order to support the diagnosis of HIT. Heparin-associated antibodies can be detected both serologically and immunologically. The main serological assays are functional tests that include platelet activation assays using washed platelets, such as the platelet ¹⁴C Serotonin-Release Assay (SRA) or the heparin-induced platelet activation (HIPA) test. These assays primarily detect platelet-activating antibodies of the IgG class, whether they are reactive against PF4/heparin or other heparin-dependent antigens. In contrast, immunological assays, such as GTI Diagnostics' PF4 ENHANCED® and PF4 IgG™ kits detect antibodies only when PF4 is the heparin associated protein.⁸

SUMMARY OF EXPLANATION

- Fast -- assay can be completed in 2 hours
- Cost effective
- Consistent ELISA reliability
- Up to 45 samples in duplicate

ORDER INFORMATION

CATALOG NO: HAT13G
DESCRIPTION: PF4 IgG™
SIZE: Maximum 13 Tests Per Kit
AVG SHELF LIFE: 2 Years
STORAGE: 2-8°C

CATALOG NO: HAT45G
DESCRIPTION: PF4 IgG™
SIZE: Maximum 45 Tests Per Kit
AVG SHELF LIFE: 2 Years
STORAGE: 2-8°C

For In Vitro Diagnostic Use.



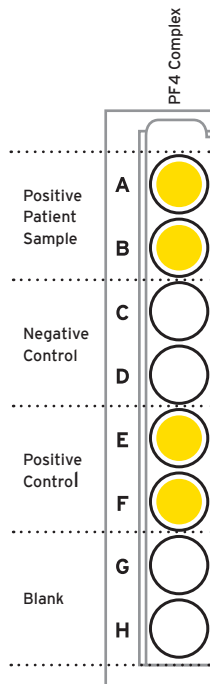
GENERAL INFORMATION

Both IgM and IgA heparin-associated antibodies are found in some patients that develop HIT. However, the majority of clinically relevant heparin-associated antibodies are IgG antibodies. Several publications have shown that these IgG antibodies are more closely associated with the development of Type II HIT in comparison to IgM and IgA antibodies. For immunoassays, detection of only IgG antibodies was shown to improve the specificity of the assay with respect to the diagnosis of HIT. The PF4 ENHANCED® assay which detects IgG, IgA, and IgM heparin associated antibodies can be used as a primary screening assay. The PF4 IgG™ which has been designed to detect only IgG heparin-associated antibodies can be used to further discriminate samples found to contain IgG, A and M heparin-associated antibodies.^{8,9,10}

GTI Diagnostics' PF4 IgG™ Solid Phase ELISA is a patented technology (US Patent# 5,972,718) for the detection of PF4 heparin-associated antibodies.

RESULTS

This sample indicates the presence of antibody against PF4 complex.



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