

## Plasminogen activator inhibitor type 1 (PAI-1)



### **Description, significance:**

PAI-1 blocks the effect of tissue-type plasminogen activator (tPA) and urokinase-type plasminogen activator (uPA) and thus has an antifibrinolytic effect. A lack of PAI-1 leads to increased fibrinolysis, and physiologically formed fibrin clots are dissolved too quickly. Therefore, severe PAI-1 deficiency can be associated with bleeding, with a great inter-individual variation of intensity.

Treatment of a possible PAI-1 deficiency is carried out with tranexamic acid (Cyklokapron®) in a dose of 3x500-3x1000 g orally or iv as required. or by infusion of plasma (e.g. Octaplas®) at a dose of approximately 20 mL/kg.

### **Reference range:**

>7 U/mL

### **References:**

Thomas L, Laboratory and Diagnosis, 2023, Release 5: <https://www.labor-und-diagnose.de/index.html>  
Parameter catalog of the Clinical Institute for Laboratory Medicine, Med.Univ.Wien and AKH Vienna: <https://www.akhwien.at/default.aspx?pid=3982>  
List of services for clinical chemistry, Univ.Klinikum Ulm: <https://www.uniklinik-ulm.de/zentrale-einrichtung-klinische-chemie/leistungskatalog.html>