Plasminogen activator inhibitor 1 (PAI-1) human recombinant, expressed in E. coli

Catalog Number A8111
Storage Temperature: –20 ºC

Synonyms: PAIE, PLANH1, Serpin E1 PAI-1, Serpine 1

Product Description
Plasminogen activator inhibitor 1 (PAI-1) protein belongs to the Serpin superfamily of serine protease inhibitors. It is the principal inhibitor of tissue plasminogen activator (tPA) and urokinase plasminogen activator (uPA), the activators of plasminogen, and therefore inhibits the fibrinolysis process. PAI is involved in extracellular matrix remodeling and has been implicated in processes like angiogenesis, chemotaxis, embryogenesis, and ovulation. PAI-1 is present in increased levels in various disease states such as a number of cancer forms, obesity and the metabolic syndrome.1-12

This product is the active human PAI-1 protein with a molecular mass of ~43 kDa. It is supplied as a lyophilized powder from a solution containing 0.5 M sodium chloride, 20 mM sodium acetate, and 50 mg/mL trehalose.

Purity: ≥90% by SDS-PAGE
Activity: ≥200,000 U/mg protein

Unit definition: 1 Unit irreversibly inhibits (100% inhibition) 1 Unit of tissue plasminogen activator (tPA) under physiological conditions (neutral pH and 37 ºC).

Precautions and Disclaimer
For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions
Reconstitute with 100 µL of ultrapure water. The reconstituted product contains 0.25 mg protein per mL in 0.5 M sodium chloride, 20 mM sodium acetate, and 50 mg/mL trehalose.

Storage/Stability
Store the product at –20 ºC. The product remains active for 2 years, as supplied, properly stored, and unopened.

After reconstitution, the enzyme should be refrozen at –70 ºC in aliquots. The reconstituted product is stable for 1 month at –20 ºC and for at least 2 months at –70 ºC.

References

EB,KAA,PHC,GCY,MAM 08/19-1

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