

# 41070 Recombinant Human Plasminogen Activator Inhibitor 1 (hPAI-1)

<b>Source:</b>	Expressed in <i>E.coli</i>
<b>Tag:</b>	N-terminal 6xHis
<b>Size:</b>	100µg
<b>Purity:</b>	>95%, determined by SDS-PAGE
<b>Other Names:</b>	Serpin E1

## Introduction to the Molecule

As a member of the Serpin superfamily of serine protease inhibitors, plasminogen activator inhibitor 1 (PAI-1) is the principal inhibitor of urokinase-type plasminogen activator and tissue-type PA. As important regulators of extracellular matrix remodeling, uPA and PAI-1 play a major role in many processes such as angiogenesis, tumor invasion and obesity. For example, uPA and PAI-1 are the only tumor prognostic factors validated at the highest level of evidence about their clinical utility in breast cancer.

## Amino Acid Sequence

**MSYYHHHHHHDYDIPTTENLYFQGAMGS**  
VHHPPSYVAHLASDFGVRVVFQQVAQASKDRN  
VVFSPYGVASVLAMLQLTTGGETQQQIQAA  
GFKIDDKGMAPALRHLYKELMGPWNKDEIST  
TDAIFVQRDLKLVQGFMPHFFRLFRSTVKQVD  
FSEVERARFIINDWVKTHTKGMISNLLGKGAV  
DQLTRLVLVNALYFNGQWKTPFPDSSTHRRLF  
HKSDGSTVSVPMMAQTNKFNYTEFTTPDGHY  
YDILELPYHGDTLSMFIAAPYEKEVPLSALTNIL  
SAQLISHWKGNMTRLPRLLVLPKFSLETEVDL  
RKPLENLGMTDMFRQFQADFTSLSDQEPLHV  
AQALQKVKIEVNESGTVASSSTAVIVSARMAP  
EEIIMDRPFLFVVRHNPTGTVLFMGQVMPEP

Note: **6xhis tag** and **TEV site** are highlighted

## Formulation, Reconstitution and Storage

- Lyophilized at 0.3 mg/mL in NaCl 137mM, KCl 2.7mM, Na<sub>2</sub>HPO<sub>4</sub> 10mM, KH<sub>2</sub>PO<sub>4</sub> 1.8mM, pH 8.0.
- Add deionized water to prepare a working stock solution of approximately 1 mg/mL and let the lyophilized pellet dissolve completely.
- Store lyophilized protein at -20°C. Aliquot reconstituted protein and store at -80°C. Avoid repeated freezing /thawing cycles.

## SDS-PAGE Gel

