abcam

Product datasheet

Recombinant human PAI1 (mutated N150H + K154T + Q319L + M354I) protein ab92969

1 Image

Description

Product name	Recombinant human PAI1 (mutated N150H + K154T + Q319L + M354I) protein
Biological activity	>95% active by uPA titration. Kinetic Data: Second order rate constants for inhibition of: uPA = 5.1 X 10^6 $M^{-1}s^{-1}$ tPA = 7.9 X 10^5 $M^{-1}s^{-1}$
Purity	> 95 % SDS-PAGE. > 99% pure by SDS PAGE
Expression system	Escherichia coli
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human

Specifications

Our **Abpromise guarantee** covers the use of **ab92969** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE Functional Studies
Form	Liquid
Additional notes	Solubility: > 2 mg/mL and < 5 mg/mL Ultraviolet: Absorbance (280nm) = 2.5 epsilon $^{0.1\%}$ = 1.0 ab92969 contains the following four mutations: K154T, Q319L, M354I and N150H. These mutations combine to confer great stability to the otherwise labile molecule essentially locking in into the active conformation. It is an ideal choice for in vivo studies.

Preparation and Storage

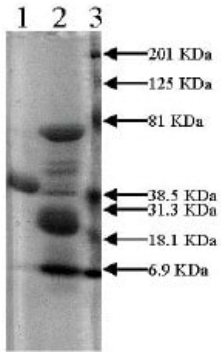
Stability and Storage	Shipped on Dry Ice. Store at -80°C. pH: 6.60 Constituents: 0.82% Sodium phosphate, 0.0292% EDTA, 0.58% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function	This inhibitor acts as 'bait' for tissue plasminogen activator, urokinase, and protein C. Its rapid interaction with TPA may function as a major control point in the regulation of fibrinolysis.
Tissue specificity	Found in plasma and platelets and in endothelial, hepatoma and fibrosarcoma cells.
Involvement in disease	Defects in SERPINE1 are the cause of plasminogen activator inhibitor-1 deficiency (PAI-1D) [MIM:613329]. It is a hematologic disorder characterized by increased bleeding after trauma, injury, or surgery. Affected females have menorrhagia. The bleeding defect is due to increased fibrinolysis of fibrin blood clots due to deficiency of plasminogen activator inhibitor-1, which inhibits tissue and urinary activators of plasminogen. Note=High concentrations of SERPINE1 seem to contribute to the development of venous but not arterial occlusions.
Sequence similarities	Belongs to the serpin family.
Post-translational modifications	Inactivated by proteolytic attack of the urokinase-type (u-PA) and the tissue-type (TPA), cleaving the 369-Arg- -Met-370 bond.
Cellular localization	Secreted.

Images



SDS-PAGE - Recombinant human PAI1 (mutated N150H + K154T + Q319L + M354I) protein (ab92969)

10% SDS Page Gelcode Blue Stain

1. 3ug ab92969 reduced
2. 3ug ab92969 + 12ug Urokinase reduced
3. prestained standard

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