

California Bioscience

Product Datasheet

Product Name	Plasminogen Activator Inhibitor-1 Human
Cata No	CB500531
Source Synonyms	PAI-1, PAI1, PLANH1, SERPINE1, PAIE, PLASMINOGEN ACTIVATOR INHIBITOR, BETA-MIGRATING ENDOTHELIAL-CELL-DERIVED TYPE.

Description

Plasminogen activator inhibitor-1 is the principal inhibitor of tissue plasminogen activator(tPA) and urokinase(uPA), the activators of plasminogenand hence fibrinolysis(the physiological breakdown of blood clots). It is a serine protease inhibitor(serpin) protein (SERPINE1). The other PAI, plasminogen activator inhibitor-2(PAI-2) is secreted by the placentaand only present in significant amounts during pregnancy. In addition, protease nexinacts as an inhibitor of tPA and urokinase. PAI-1, however, is the main inhibitor of the plasminogen activators. Constitutively active human plasminogen activator inhibitor 1, stable mutant 14-1B1 having a Molecular mass of 43 kDa. This human form of PAI-1 contains the following four mutations: K154T, Q139L, M354I and N150H. These mutations combine to confer great stability to the otherwise labile molecule essentially locking it into the active conformation.

The PAI1 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered clear colorless solution.

Purity

Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

Formulation

0.05M sodium phosphate 0.15M NaCl and 1mM EDTA (pH 6.6).

Stability

Human Plasminogen Activator Inhibitor 1 although stable at 8°C celsius for 1 week, should be stored desiccated below -18°C.