Data Sheet (Cat.No.TMPH-02833)

PAI-1 Protein, Mouse, Recombinant (His)

General Information

Synonyms:	Pai1;PAI-1;Mr1;PAI;Plasminogen activator inhibitor 1;Planh1;Serpin E1;Serpine1;Endothelial plasminogen activator inhibitor
Protein Construction:	23-402 aa
Species:	Mouse
Expression Host:	P. pastoris (Yeast)
Accession:	P22777
Molecular Weight:	44.9 kDa (predicted)
AA Sequence:	TLPLRESHTAHQATDFGVKVFQQVVQASKDRNVVFSPYGVSSVLAMLQMTTAGKTRRQIQDAMGFKVNEKG TAHALRQLSKELMGPWNKNEISTADAIFVQRDLELVQGFMPHFFKLFQTMVKQVDFSEVERARFIINDWVER HTKGMINDLLAKGAVDELTRLVLVNALYFSGQWKTPFLEASTHQRLFHKSDGSTVSVPMMAQSNKFNYTEFT TPDGLEYDVVELPYQRDTLSMFIAAPFEKDVHLSALTNILDAELIRQWKGNMTRLPRLLILPKFSLETEVDLRGP LEKLGMPDMFSATLADFTSLSDQEQLSVAQALQKVRIEVNESGTVASSSTAFVISARMAPTEMVIDRSFLFVVR HNPTETILFMGQVMEP

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90% as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM Tris-HCl, 0.5M NaCl, 6% Trehalose, pH8.0.

Preparation and Storage

Reconstitution:

Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and
aliquot for long-term storage at -20℃/-80℃. Our default final concentration of glycerol is 50%.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Serine protease inhibitor. Inhibits TMPRSS7. Is a primary inhibitor of tissue-type plasminogen activator (PLAT) and urokinase-type plasminogen activator (PLAU). As PLAT inhibitor, it is required for fibrinolysis down-regulation and is responsible for the controlled degradation of blood clots. As PLAU inhibitor, it is involved in the regulation of cell adhesion and spreading. Acts as a regulator of cell migration, independently of its role as protease inhibitor. It is required for stimulation of keratinocyte migration during cutaneous injury repair. Involved in cellular and replicative senescence. Plays a role in alveolar type 2 cells senescence in the lung. Is involved in the regulation of cementogenic differentiation of periodontal ligament stem cells, and regulates odontoblast differentiation and dentin formation during odontogenesis.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481