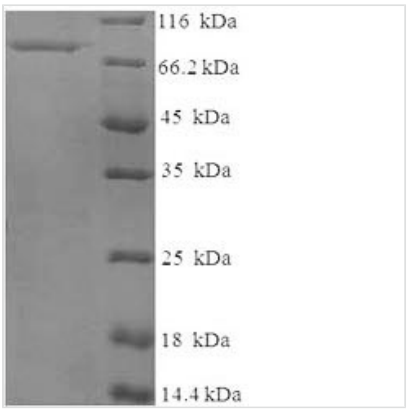
Recombinant Human Tissue-type plasminogen activator (PLAT), partial

Product Code	CSB-EP018120HU
Relevance	Converts the abundant, but inactive, zymogen plasminogen to plasmin by hydrolyzing a single Arg-Val bond in plasminogen. By controlling plasmin-mediated proteolysis, it plays an important role in tissue rodeling and degradation, in cell migration and many other physiopathological events. Plays a direct role in facilitating neuronal migration.
Abbreviation	Recombinant Human PLAT protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P00750
Alias	INN: AlteplaseINN: Reteplase
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	SYQVICRDEKTQMIYQQHQSWLRPVLRSNRVEYCWCNSGRAQCHSVPVKSC SEPRCFNGGTCQQALYFSDFVCQCPEGFAGKCCEIDTRATCYEDQGISYRGT WSTAESGAECTNWNSSALAQKPYSGRRPDAIRLGLGNHNYCRNPDRDSKPW CYVFKAGKYSSEFCSTPACSEGNSDCYFGNGSAYRGTHSLTESGASCLPWN SMILIGKVYTAQNPSAQALGLGKHNYCRNPDGDAKPWCHVLKNRRLTWEYCD VPSCSTCGLRQYSQPQFRIKGGLFADIASHPWQAAIFAKHRRSPGERFLCGGI LISSCWILSAAHCFQERFPPHHLTVILGRTYRVVPGEEEQKFEVEKYIVHKEFD DDTYDNDIALLQLKSDSSRCAQESSVVRTVCLPPADLQLPDWTECELSGYGK HEALSPFYSERLKEAHVRLYPSSRCTSQHLLNRTVTDNMLCAGDTRSGGPQA NLHDACQGDSGGPLVCLNDGRMTLVGIISWGLGCGQKDVPGVYTKVTNYLD WI
Research Area	Cancer
Source	E.coli
Target Names	PLAT
Expression Region	36-556aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	74.3kDa
Protein Length	Partial

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The production of this recombinant Human PLAT protein is just like all recombinant proteins. The process involved transfecting E.coli cells with DNA vector containing the template of recombinant DNA. The E.coli cells containing the template were then cultured so that they could transcribe and translate the PLAT protein. N-terminal 6xHis-SUMO tag was used in the process. The purity is 90% determined by SDS-PAGE.

PLAT is a gene providing instructions for making a protein named tissue-type plasminogen activator (also known as a t-plasminogen activator, tPA). This protein is a serine protease that converts a zymogen plasminogen into an active serine protease, namely, plasmin (the primary enzyme involved in dissolving blood clots). tPA is involved in blood coagulation, cellular protein modification process, fibrinolysis, response to hypoxia, smooth muscle cell migration and trans-synaptic signaling by BDNF, modulating synaptic transmission.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. 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°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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