

tPA assay kit

Rat tPA total antigen ELISA Kit

CATALOG #
AAA71825

PRODUCT SYNONYMS

tPA; Rat tPA total antigen ELISA Kit; Activity Assay for Total Rat tPA; tPA assay kit

PRODUCT SPECIFICATIONS

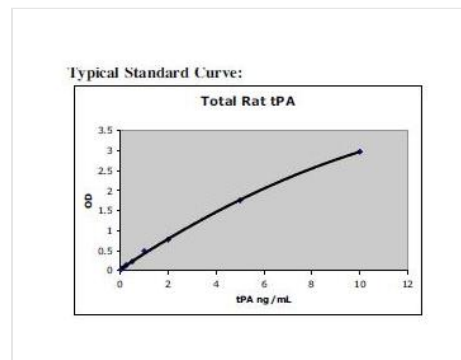
Sequence Length	19
Procedural Notes	1. This assay should be run at room temperature. 2. Use aseptic technique when opening and dispensing reagents. 3. To minimize error due to handling, wipe the exterior bottom of the microplate wells with a lintfree paper towel.
Reagent Preparation	The following solutions should be prepared fresh before starting the assay. 1. TBS Buffer: 0.10 M TRIS, 0.15 M NaCl, pH 7.4 2. Blocking Buffer: 3% BSA in TBS Buffer. 3. 10x Wash Buffer: Dilute to 1x prior to use. Do this by combining 1 part of 10x Wash Buffer to 9 parts of DI Water relative to the amount required for the assay, either in whole or in part.
Sample Collection, Storage and Preparation	Samples should be collected using trisodium citrate, acidified citrate or Stabilytetm (DiaPharma) collection media. Collection should be in accordance with the collection vials manufacturers instructions or in a 1:10 ratio of collection media to blood. Immediately, upon collection of blood, the samples should be centrifuged at 3000 x g. This should ensure the removal of platelets as they can release PAI-1 that, in turn, complexes with tPA. The plasma can be transferred to a clean plastic tube and stored frozen for up to one month. Samples are stable for approximately 24 hours when stored at 4 degree C with the Sabilytetm media or one month if stored at -20 degree C. Note: Detergents such as Triton X cause interference with the assay. If using detergent extracted samples, it is necessary to dialyze the samples overnight to remove the detergent.
Preparation and Storage	1. Store the kit and all of its components at 4 degree C before use. 2. If not using the entire plate at once, prepare only the appropriate amount of Primary Antibody and PAI-1 Standard. The remaining stock solutions should be frozen and stored at At -70C. Primary Antibody should be used within two weeks. All other components should remain refrigerated. 3. Store unused portions of the microplate in the pouch with a desiccant at 4 degree C.

IMAGES

Scheme I:

	1	2	3	4	5	6	7	8	9	10	11	12
A	S ₀	S ₁	S ₂	S ₃	S ₄	S ₅	S ₆	S ₇	S ₈	S ₉	S ₁₀	U ₁
B	S ₀	S ₁	S ₂	S ₃	S ₄	S ₅	S ₆	S ₇	S ₈	S ₉	S ₁₀	U ₁
C	U ₂	U ₃	U ₄	U ₅	U ₆	U ₇	U ₈	U ₉	U ₁₀	U ₁₁	U ₁₂	U ₁₃
D	U ₂	U ₃	U ₄	U ₅	U ₆	U ₇	U ₈	U ₉	U ₁₀	U ₁₁	U ₁₂	U ₁₃
E	U ₁₄	U ₁₅	U ₁₆	U ₁₇	U ₁₈	U ₁₉	U ₂₀	U ₂₁	U ₂₂	U ₂₃	U ₂₄	U ₂₅
F	U ₁₄	U ₁₅	U ₁₆	U ₁₇	U ₁₈	U ₁₉	U ₂₀	U ₂₁	U ₂₂	U ₂₃	U ₂₄	U ₂₅
G	U ₂₆	U ₂₇	U ₂₈	U ₂₉	U ₃₀	U ₃₁	U ₃₂	U ₃₃	U ₃₄	U ₃₅	U ₃₆	BLK
H	U ₂₆	U ₂₇	U ₂₈	U ₂₉	U ₃₀	U ₃₁	U ₃₂	U ₃₃	U ₃₄	U ₃₅	U ₃₆	BLK

Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for tPA assay kit	Introduction: Tissue-type Plasminogen Activator (tPA) is a member of the serine proteinase family. tPA functions to lyse fibrin clots into soluble plasmin fragments. tPA is active in two forms, single chain and two chain. The two chain tPA is created via interaction with the plasmin product cleaving the single chain. This two chain form is regarded as the more active form. Both single chain and two chain tPA are complexable with PAI-1. PAI-1 acts as an inhibitor for tPA by binding to the tPA and thus stifling its ability to lyse fibrin. tPA can serve as an indicator of both myocardial infarction for patients with impaired fibrinolytic systems as well as a marker for type-II diabetes. Principle of assay: This is an ELISA (Enzyme-Linked Immunosorbent Assay) for the quantitative analysis of tPA levels in biological fluid. This test kit operates on the basis of sandwich ELISA where free, latent and complexed tPA is quantified with the use of an HRP labeled secondary antibody. The various forms of tPA present in the standard or unknown is captured by the tPA capture antibody coated on the well. A primary antibody specific for tPA is then added to each well followed by the HRP conjugated secondary antibody. The bound conjugated secondary antibody is detected by the addition of substrate, which generates an optimal color after 10 minutes. Quantitative test results may be obtained by the measure and comparison of the sample and standard absorbance readings when read with a microplate reader at 450 nm.
References	1. Lidbury, P., et al., (1990) Br J Pharmacol 101(3):527-530 2. Krishnamurti, C., et al., (1991) J Lab Clin Med 118(6):523-530 3. Nordt, T., et al., (1995) Circulation 91(3):764-770 4. Debrock, S., et al., (1997) Biochem Biophys Acta 1337(2):257-266 5. Nordt, T., et al., (1998) J Mol Cell Cardiol 30(8):1535-1543 6. Ngo, T., et al., (1999) Thromb Haemost 82(5):1510-1515

NCBI AND UNIPROT INFORMATION

NCBI GI #	2285954
NCBI GeneID	5327
UniProt Accession #	Q6LBF5; P00750
Molecular Weight	2,342 Da
NCBI Official Full Name	tPA, partial
NCBI Official Synonym Full Names	plasminogen activator, tissue
NCBI Official Symbol	PLAT
NCBI Official Synonym Symbols	TPA; T-PA
NCBI Protein Information	tissue-type plasminogen activator; alteplase; plasminogen activator, tissue type; plasminogen/activator kringle; reteplase; t-plasminogen activator; tissue plasminogen activator (t-PA)
UniProt Protein Name	TPA protein
UniProt Gene Name	tPA
UniProt Entry Name	Q6LBF5_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/assay-kits/tpa/71825>