



Sheep anti Human Tissue Plasminogen Activator polyclonal antibody [HRP] (CABT-L482)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Prior to conjugation, this antibody was specific for tPA as demonstrated by immunoelectrophoresis and ELISA.
Target	tPA
Immunogen	Human tissue-type plasminogen activator prepared from melanoma cell line.
Isotype	IgG
Source/Host	Sheep
Species Reactivity	Human
Conjugate	HRP
Applications	IEP, ELISA
Format	Liquid
Size	200 µg
Buffer	A buffered stabilizer solution containing 50% (v/v) glycerol.
Preservative	None
Storage	Store between -10 and -20°C. Product will become viscous but will not freeze. Avoid storage in frost-free freezers. Keep vial tightly capped. Allow product to warm to room temperature and gently mix before use. Avoid exposure to sodium azide as this is an inhibitor of peroxidase activity.

BACKGROUND

Introduction

Tissue-type plasminogen activator (tPA) is one of two major physiologic activators of plasminogen in plasma. It is a serine protease of 68 kDa produced primarily in endothelial cells but is also present in monocytes and megakaryocytes. Normal plasma tPA antigen concentrations have been reported from 20 ng/ml to 5 µg/ml, depending on the assay used, but typically most of the tPA (> 90%) is in complex with its primary inhibitor, plasminogen activator inhibitor-1 (PAI-1). Structurally, tPA is a single-chain enzyme that consists of a catalytic domain followed by two kringle structures, an EGF domain and a finger domain. The activation of plasminogen by tPA is dependent on the presence of a fibrin cofactor. The binding of both tPA and plasminogen to fibrin is mediated in part through lysine binding sites within the kringle structures of both enzyme and substrate, but also through the finger domain of tPA. Activation of plasminogen by tPA occurs by cleavage after residue Arg560 to produce the two-chain active serine protease plasmin. The activity of tPA is regulated in part by a very short half life in circulation ($t_{1/2}$ of ~4 minutes) and by circulating protease inhibitors PAI-1 and to a lesser extent α_2 macroglobulin.

Keywords

PLAT;plasminogen activator, tissue;tPA;AU020998;AW212668;D8Ert2e;tissue-type plasminogen activator;t-plasminogen activator;

GENE INFORMATION

Entrez Gene ID

[5327](#)

UniProt ID

[P00750](#)