

## Product datasheet

# Biotin Anti-Tissue Plasminogen Activator antibody ab51518

★★★★★ [1 Abreviews](#) [1 References](#)

### Overview

<b>Product name</b>	Biotin Anti-Tissue Plasminogen Activator antibody
<b>Description</b>	Biotin Sheep polyclonal to Tissue Plasminogen Activator
<b>Host species</b>	Sheep
<b>Conjugation</b>	Biotin
<b>Tested applications</b>	<b>Suitable for:</b> ELISA, IP, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Human TPA purified from human plasma.
<b>Positive control</b>	Purified rPA.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: 49.73% PBS, 50% Glycerol (glycerin, glycerine), 0.25% BSA</p>
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab51518 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA	★★★★★ (1)	Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration.

## Target

### Function

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 remodeling and degradation, in cell migration and many other physiopathological events. Play a direct role in facilitating neuronal migration.

### Tissue specificity

Synthesized in numerous tissues (including tumors) and secreted into most extracellular body fluids, such as plasma, uterine fluid, saliva, gingival crevicular fluid, tears, seminal fluid, and milk.

### Involvement in disease

Note=Increased activity of TPA results in increased fibrinolysis of fibrin blood clots that is associated with excessive bleeding. Defective release of TPA results in hypofibrinolysis that can lead to thrombosis or embolism.

### Sequence similarities

Belongs to the peptidase S1 family.  
Contains 1 EGF-like domain.  
Contains 1 fibronectin type-I domain.  
Contains 2 kringle domains.  
Contains 1 peptidase S1 domain.

### Domain

Both FN1 and one of the kringle domains are required for binding to fibrin.  
Both FN1 and EGF-like domains are important for binding to LRP1.  
The FN1 domain mediates binding to annexin A2.  
The second kringle domain is implicated in binding to cytokeratin-8 and to the endothelial cell surface binding site.

### Post-translational modifications

The single chain, almost fully active enzyme, can be further processed into a two-chain fully active form by a cleavage after Arg-310 catalyzed by plasmin, tissue kallikrein or factor Xa.  
Differential cell-specific N-linked glycosylation gives rise to two glycoforms, type I (glycosylated at Asn-219) and type II (not glycosylated at Asn-219). The single chain type I glycoform is less readily converted into the two-chain form by plasmin, and the two-chain type I glycoform has a lower activity than the two-chain type II glycoform in the presence of fibrin.  
N-glycosylation of Asn-152; the bound oligomannosidic glycan is involved in the interaction with the mannose receptor.  
Characterization of O-linked glycan was studied in Bowes melanoma cell line.

### Cellular localization

Secreted > extracellular space.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Replacement or refund for products not performing as stated on the datasheet
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- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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