# abcam

## Product datasheet

# Anti-Plasminogen antibody [EPR22406-159] - BSA and Azide free ab245832

Recombinant RabMAb

## 2 Images

#### Overview

**Product name** Anti-Plasminogen antibody [EPR22406-159] - BSA and Azide free

**Description** Rabbit monoclonal [EPR22406-159] to Plasminogen - BSA and Azide free

**Host species** Rabbit

**Tested applications** Suitable for: WB, IP

Unsuitable for: IHC-Fr or IHC-P

Species reactivity Reacts with: Mouse

**Immunogen** Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control IP: Mouse liver lysate.

**General notes** ab245832 is the carrier-free version of ab245247.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

1

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

**Clonality** Monoclonal

Clone number EPR22406-159

**Isotype** IgG

#### **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab245832 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
WB		Use at an assay dependent concentration. Detects a band of approximately 97 kDa (predicted molecular weight: 91 kDa).
IP		Use at an assay dependent concentration.

**Application notes** Is unsuitable for IHC-Fr or IHC-P.

#### **Target**

#### **Function**

Plasmin dissolves the fibrin of blood clots and acts as a proteolytic factor in a variety of other processes including embryonic development, tissue remodeling, tumor invasion, and inflammation. In ovulation, weakens the walls of the Graafian follicle. It activates the urokinase-type plasminogen activator, collagenases and several complement zymogens, such as C1 and C5. Cleavage of fibronectin and laminin leads to cell detachment and apoptosis. Also cleaves fibrin, thrombospondin and von Willebrand factor. Its role in tissue remodeling and tumor invasion may be modulated by CSPG4. Binds to cells.

Angiostatin is an angiogenesis inhibitor that blocks neovascularization and growth of experimental primary and metastatic tumors in vivo.

#### **Tissue specificity**

Present in plasma and many other extracellular fluids. It is synthesized in the liver.

#### Involvement in disease

Defects in PLG are a cause of susceptibility to thrombosis (THR) [MIM:188050]. It is a multifactorial disorder of hemostasis characterized by abnormal platelet aggregation in response to various agents and recurrent thrombi formation.

Defects in PLG are the cause of plasminogen deficiency (PLGD) [MIM:217090]. PLGD is characterized by decreased serum plasminogen activity. Two forms of the disorder are distinguished: type 1 deficiency is additionally characterized by decreased plasminogen antigen levels and clinical symptoms, whereas type 2 deficiency, also known as dysplasminogenemia, is characterized by normal, or slightly reduced antigen levels, and absence of clinical manifestations. Plasminogen deficiency type 1 results in markedly impaired extracellular fibrinolysis and chronic

mucosal pseudomembranous lesions due to subepithelial fibrin deposition and inflammation. The most common clinical manifestation of type 1 deficiency is ligneous conjunctivitis in which pseudomembranes formation on the palpebral surfaces of the eye progresses to white, yellowwhite, or red thick masses with a wood-like consistency that replace the normal mucosa.

Sequence similarities Belongs to the peptidase S1 family. Plasminogen subfamily.

> Contains 5 kringle domains. Contains 1 PAN domain.

Contains 1 peptidase S1 domain.

**Domain** Kringle domains mediate interaction with CSPG4.

Post-translational N-linked glycan contains N-acetyllactosamine and sialic acid. O-linked glycans consist of Galmodifications

GalNAc disaccharide modified with up to 2 sialic acid residues (microheterogeneity).

In the presence of the inhibitor, the activation involves only cleavage after Arg-580, yielding two chains held together by two disulfide bonds. In the absence of the inhibitor, the activation involves

additionally the removal of the activation peptide.

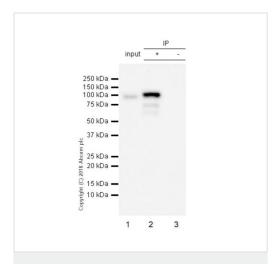
**Cellular localization** Secreted. Locates to the cell surface where it is proteolytically cleaved to produce the active

plasmin. Interaction with HRG tethers it to the cell surface.

**Form** Cleaved into the following 5 chains: 1.Plasmin heavy chain A2.Activation

peptide3. Angiostatin4. Plasmin heavy chain A, short form5. Plasmin light chain B

#### **Images**



Immunoprecipitation - Anti-Plasminogen antibody [EPR22406-159] - BSA and Azide free (ab245832)

Plasminogen was immunoprecipitated from 0.35 mg of mouse liver lysate with ab245247 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab245247 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/5000 dilution.

Lane 1: Mouse liver lysate 10 µg (Input).

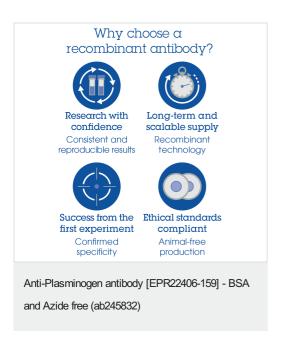
Lane 2: ab245247 IP in mouse liver lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab245247 in mouse liver lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 30 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab245247).



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