# Anti-TPA Tissue Plasminogen Activator antibody [2A153] ab21049

- **Product name**: Anti-TPA Tissue Plasminogen Activator antibody [2A153]
- **Description**: Mouse monoclonal [2A153] to TPA Tissue Plasminogen Activator
- **Host species**: Mouse
- **Tested applications**: Suitable for: WB, IHC-FoFr
- **Species reactivity**: Reacts with: Human, Xenopus laevis
- **Immunogen**: Recombinant full length protein: human tPA
- **Positive control**: Recombinant human TPA
- **General notes**: This product used to be produced in ascites, lots up to and including GR248929-9 were produced in Ascites. All later lots are produced in TCS.

## Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Form</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Storage instructions</strong></td>
<td>Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.</td>
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<tr>
<td><strong>Storage buffer</strong></td>
<td>pH: 6.60</td>
</tr>
<tr>
<td></td>
<td>Constituents: 0.82% Sodium phosphate, 0.0292% EDTA, 0.58% Sodium chloride</td>
</tr>
<tr>
<td><strong>Purity</strong></td>
<td>Protein A purified</td>
</tr>
<tr>
<td><strong>Purification notes</strong></td>
<td>&gt;98% pure (SDS-PAGE).</td>
</tr>
<tr>
<td><strong>Clonality</strong></td>
<td>Monoclonal</td>
</tr>
<tr>
<td><strong>Clone number</strong></td>
<td>2A153</td>
</tr>
<tr>
<td><strong>Myeloma</strong></td>
<td>unknown</td>
</tr>
<tr>
<td><strong>Isotype</strong></td>
<td>IgG</td>
</tr>
<tr>
<td><strong>Light chain type</strong></td>
<td>unknown</td>
</tr>
</tbody>
</table>

## Applications

Our Abpromise guarantee covers the use of ab21049 in the following tested applications.

Not yet tested in other applications.
Optimal dilutions/concentrations should be determined by the end user.

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 cytokerin-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 oligomannoisidic 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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