**MONOCLONAL ANTIBODY TO**
**HUMAN PLASMINOGEN ACTIVATOR TYPE 1 (PAI-1),**
**hF epitope**
**clone MA-33H1F7**

<table>
<thead>
<tr>
<th>Catalog no</th>
<th>HM2179 (lot number and expiry date are indicated on the label)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Plasminogen activator inhibitor type-1 (PAI-1), a member of the serine protease inhibitor (serpin) superfamily, is an important protein in the regulation of fibrinolysis. PAI-1 is unique among the serpins because of its functional and conformational flexibility. PAI-1 is the most important physiological inhibitor of both tissue-type plasminogen activator (t-PA) and urokinase-type plasminogen activator (u-PA). Increased PAI-1 levels are associated with thrombotic events and is an established risk factor for cardiovascular diseases. The active conformation PAI-1 inhibits its target proteases by the formation of a stable, inactive complex. Although PAI-1 is synthesized as an active molecule, it converts spontaneously to an inactive, latent form that can be partially reactivated by denaturing agents. In addition, a third conformation reacting as a non-inhibitory substrate towards various target proteases has been identified. The epitope of monoclonal antibody MA-33H1F7 is predominantly composed of three residues (Lys(^{154}), Glu(^{130}), Arg(^{131})), positioned virtually linearly in the three-dimensional structure. The epitope of the antibody does not cover the complete alpha-helix F and turn connecting alpha-helix F and beta-strand s3A, but is restricted to the hinge region between alpha-helix F and the main part of the PAI-1 molecule. The monoclonal antibody MA-33H1F7 is a ‘switching’ antibody, capable of inducing a non-inhibitory substrate form of PAI-1. It was shown to inhibit PAI-1 in a dose dependent manner.</td>
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<tr>
<td>Aliases</td>
<td>PAI-1, endothelial plasminogen activator inhibitor, serpin E1</td>
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<tr>
<td>Immunogen</td>
<td>Human PAI-1/t-PA complex</td>
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<tr>
<td>Species</td>
<td>Mouse IgG(_1)</td>
</tr>
<tr>
<td>Cross reactivity</td>
<td>Cross reactant</td>
</tr>
<tr>
<td></td>
<td>Mouse, rat</td>
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<tr>
<td>Formulation</td>
<td>1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS, containing 0.1% bovine serum albumin.</td>
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<tr>
<td>Application notes</td>
<td>W: A non-reduced sample treatment and SDS-Page was used. The band size is 52 kDa (Ref.5). FS: Antibody MA-33H1F7 functions as an antagonist. The antibody was incubated with active PAI-1 and residual activity was measured by a functional assay (Ref.1).</td>
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<tr>
<td>Application</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>N.D.</td>
<td></td>
</tr>
</tbody>
</table>

N.D. = Not Determined; F = Frozen sections; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IF = Immuno Fluorescence; IP = Immuno Precipitation; P = Paraffin sections; W = Western blot

| References | |
| 2. | Berry, C et al; Antithrombotic activity of a monoclonal antibody inducing the substrate form of plasminogen activator inhibitor type 1 in rat models of venous and arterial thrombosis. Br J Pharm 1998, 125: 29 |
**Use**

For Western blotting, dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50. For functional studies, dilutions have to be optimized in user’s experimental setting.

**Storage and stability**

Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year. The exact expiry date is indicated on the label.

**Precautions**

For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

**Also available**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>HM2180</td>
<td>Monoclonal antibody against Human PAI-1, AF epitope, clone MA-55F4C12</td>
</tr>
<tr>
<td>HM2181</td>
<td>Monoclonal antibody against Human PAI-1, Ts3BhG/RCL epitope, clone MA-56A7C10</td>
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