Mouse Anti-Phosphotyrosine

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Format</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1400-01</td>
<td>Purified (UNLB)</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>1400-02</td>
<td>Fluorescein (FITC)</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>1400-04</td>
<td>Alkaline Phosphatase (AP)</td>
<td>1.0 mL</td>
</tr>
<tr>
<td>1400-05</td>
<td>Horseradish Peroxidase (HRP)</td>
<td>1.0 mL</td>
</tr>
<tr>
<td>1400-08</td>
<td>Biotin (BIOT)</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>1400-09</td>
<td>R-phycoerythrin (PE)</td>
<td>0.1 mg</td>
</tr>
</tbody>
</table>

Overview

Clone          PY20
Isotype        Mouse (BALB/c) IgG2b
Immunogen      Phosphotyrosine conjugated to carrier proteins
Specificity    Tyrosine-phosphorylated proteins
Alternate Name(s)  pTyr20

Description

Protein tyrosine residues are phosphorylated as a result of intracellular protein kinase activation (e.g., via growth factors) during normal growth and development and in oncogenesis. The most abundant population of target proteins for tyrosine phosphorylation is cell surface glycoproteins. Antibodies to phosphotyrosine enable the detection, isolation, and characterization of proteins containing phosphotyrosine. The monoclonal antibody PY20 prevents internalization of activated receptors (e.g., EGFR) when microinjected into cells. The affinity of PY20 for phosphotyrosine is approximately $10^{-6}$ to $10^{-7}$ M. PY20 binding to phosphorylated tyrosines can be inhibited by free phosphotyrosine and phenylphosphate but not by phosphoserine, phosphothreonine, or free phosphate.

Applications

ELISA – Quality tested
FLISA – Quality tested
WB – Reported in literature
IP – Reported in literature
IHC-PS – Reported in literature
IHC-WM – Reported in literature
ICC – Reported in literature
FC – Reported in literature
Microarray – Reported in literature
Purification – Reported in literature

Working Dilutions

<table>
<thead>
<tr>
<th>Method</th>
<th>Conjugate</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELISA</td>
<td>AP conjugate</td>
<td>1:1,000 – 1:2,000</td>
</tr>
<tr>
<td></td>
<td>HRP conjugate</td>
<td>1:1,000 – 1:4,000</td>
</tr>
<tr>
<td></td>
<td>BIOT conjugate</td>
<td>1:5,000 – 1:10,000</td>
</tr>
<tr>
<td>FLISA</td>
<td>FITC conjugate</td>
<td>1:200 – 1:400</td>
</tr>
<tr>
<td></td>
<td>PE conjugate</td>
<td>≤ 1 μg/mL</td>
</tr>
</tbody>
</table>

Other Applications

Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.
Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. No preservatives or amine-containing buffer salts added. Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL PBS/NaN₃. Store at 2-8°C.
- The alkaline phosphatase (AP) conjugate is supplied as 1.0 mL of stock solution in 50 mM Tris/1 mM MgCl₂/50% glycerol, pH 8.0, containing NaN₃ as preservative. Store at 2-8°C or long-term at -20°C.
- The horseradish peroxidase (HRP) conjugate is supplied as 1.0 mL of stock solution in 50% glycerol/50% PBS, pH 7.4. No preservative added. Store at 2-8°C or long-term at -20°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. Do not freeze!
- Do not freeze!
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific (M)SDS.

References