

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human and mouse Tie-2 when phosphorylated at Y1102 and Y1100, respectively.
<b>Source</b>	Polyclonal Rabbit IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Phosphopeptide containing human Tie-2 Y1102 site
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

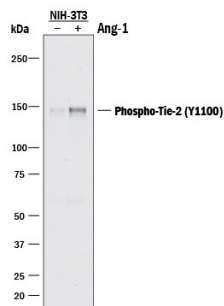
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

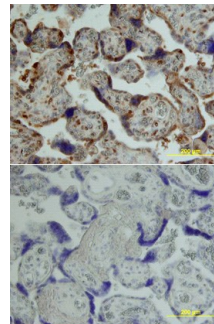
## DATA

### Western Blot



**Detection of Mouse Phospho-Tie-2 (Y1102/Y1100) by Western Blot.** Western blot shows lysates of NIH-3T3 mouse embryonic fibroblast cell line transfected with mouse Tie-2 untreated (-) or treated (+) with 600 ng/mL Recombinant Human Angiopoietin-1 (Catalog # 923-AN) for 5 minutes. PVDF membrane was probed with 1 µg/mL of Rabbit Anti-Human/Mouse Phospho-Tie-2 (Y1102/Y1100) Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3909) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for Phospho-Tie-2 (Y1102/Y1100) at approximately 150 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### Immunohistochemistry



**Tie-2 in Human Placenta.** Tie-2 phosphorylated at Y1102 was detected in immersion fixed paraffin-embedded sections of human placenta using Rabbit Anti-Human/Mouse Phospho-Tie-2 (Y1102/Y1100) Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3909) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Rabbit HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS005) and counterstained with hematoxylin (blue). Lower panel shows a lack of labeling if primary antibodies are omitted and tissue is stained only with secondary antibody followed by incubation with detection reagents. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Tie-2 (also known as TEK) is an angiogenic receptor tyrosine kinase required for the later stage of blood vessel maturation. Ligand binding induces receptor dimerization and autophosphorylation on multiple tyrosine residues. Phosphorylation of human Tie-2 at Y1102 and mouse Tie-2 at Y1100 results in the activation of PI 3-kinase (1, 2).

### References:

1. Kontos, C.D. *et al.* (1998) Mol. Cell Biol. **18**:4131.
2. Jones, N. *et al.* (1999) J. Biol. Chem. **274**:30896.