

**DESCRIPTION**

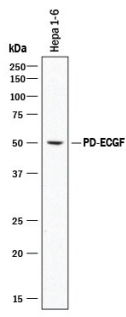
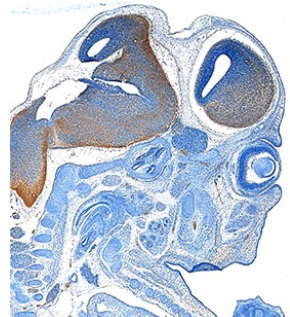
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse PD-ECGF/Thymidine Phosphorylase in direct ELISAs and Western blots.
<b>Source</b>	Monoclonal Rat IgG <sub>2B</sub> Clone # 826722
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse PD-ECGF/Thymidine Phosphorylase Met1-Pro471 Accession # Q99N42
<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.

	Recommended Concentration	Sample
<b>Western Blot</b>	2 µg/mL	See Below
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below

**DATA**

<p><b>Western Blot</b></p> 	<p><b>Detection of Mouse PD-ECGF/Thymidine Phosphorylase by Western Blot.</b> Western blot shows lysates of Hepa 1-6 mouse hepatoma cell line. PVDF membrane was probed with 2 µg/mL of Rat Anti-Mouse PD-ECGF/Thymidine Phosphorylase Monoclonal Antibody (Catalog # MAB7568) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for PD-ECGF/Thymidine Phosphorylase at approximately 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>PD-ECGF/Thymidine Phosphorylase in Mouse Embryo.</b> PD-ECGF/Thymidine Phosphorylase was detected in immersion fixed frozen sections of mouse embryo (15 d.p.c.) using Rat Anti-Mouse PD-ECGF/Thymidine Phosphorylase Monoclonal Antibody (Catalog # MAB7568) at 25 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Rat HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS017) and counterstained with hematoxylin (blue). Specific staining was localized to developing brain. View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.</p>
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**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 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**

TYMP (Thymidine phosphorylase/TP; also [PD]-ECGF/platelet-derived endothelial cell growth factor, gliostatin and TdRPase) is a 50-55 kDa member of the pyrimidine-nucleoside phosphorylase family of enzymes. TYMP/TP is both a cytosolic and secreted molecule that is expressed by a variety of cell types, including, macrophages, hepatocytes, endometrial gland epithelium, vascular smooth muscle and endothelial cells. It has also been found in select tumor cell types, and via an angiogenic activity, has been proposed to promote tumor growth. TYMP converts thymidine to thymine and 2-deoxy-ribose-1P, and it is the 2-deoxy-ribose component that is believed to promote endothelial cell migration (but not proliferation). This may be due to the fact that 2-deoxy-ribose induces reactive oxygen species, which drive the production of angiogenic factors, and that 2-deoxy-ribose also activates endothelial cell integrins. Mouse TYMP is 471 amino acids (aa) in length. It contains a phosphorylase domain (aa 96-348), followed by a C-terminal region (aa 374-448). Although TYMP circulates, there is no definitive signal sequence. TYMP is known to form homodimers. Full-length mouse TYMP (aa 1-471) shares 80% and 92% aa sequence identity with human and rat TYMP, respectively.