

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects PD-ECGF/Thymidine Phosphorylase in direct ELISAs. Detects human, mouse, and rat PD-ECGF/Thymidine Phosphorylase in Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse PD-ECGF/Thymidine Phosphorylase Met1-Pro471, predicted 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 either lyophilized or as a 0.2 µm filtered solution in PBS.

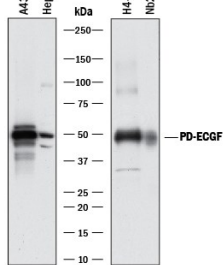
## APPLICATIONS

**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>	1 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

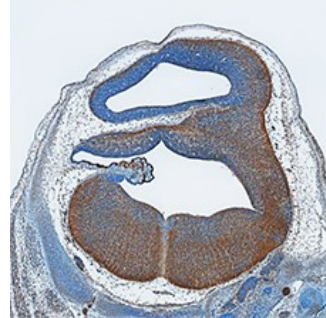
## DATA

**Western Blot**



**Detection of Human, Mouse, and Rat PD-ECGF/Thymidine Phosphorylase by Western Blot.** Western blot shows lysates of A431 human epithelial carcinoma cell line, Hepa 1-6 mouse hepatoma cell line, H4-II-E-C3 rat hepatoma cell line, and Nb2-11 rat lymphoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human/Mouse/Rat PD-ECGF/Thymidine Phosphorylase Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7568) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for PD-ECGF/Thymidine Phosphorylase at approximately 49 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Immunohistochemistry**



**PD-ECGF/Thymidine Phosphorylase in Mouse Embryonic Brain.** PD-ECGF/Thymidine Phosphorylase was detected in immersion fixed frozen sections of mouse embryonic brain (13 d.p.c.) using Sheep Anti-Human/Mouse/Rat PD-ECGF/Thymidine Phosphorylase Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7568) at 5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to plasma membrane. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<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.