

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects mouse PD-ECGF/Thymidine Phosphorylase in direct ELISAs. Detects human, mouse, and rat PD-ECGF/Thymidine Phosphorylase in Western blots.
Source	Monoclonal Rat IgG _{2B} Clone # 826722
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse PD-ECGF/Thymidine Phosphorylase Met1-Pro471 Accession # Q99N42
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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.

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