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# Anti-Thymidine Phosphorylase / PD-ECGF Antibody

Mouse Monoclonal Antibody
Catalog # AH13182

## Product Information

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| **Application** | WB, IHC-P, IP |
| **Primary Accession** | P19971 |
| **Other Accession** | 180903 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype** | Mouse / IgG1 |
| **Clone Names** | P-GF.44C |
| **Calculated MW** | 49955 |

## Additional Information

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| **Gene ID** | 1890 |
| **Other Names** | ECGF; ECGF1; Gliostatin; hPD-ECGF; MEDPS1; MNGIE; MTDPS1; PD-ECGF; PDECGF; Platelet-derived endothelial cell growth factor; TdRPase; Thymidine phosphorylase; TP; Tymp |
| **Application Note** | Western Blotting (0.5-1ug/ml); Immunoprecipitation (0.5-1 □g/500ug protein lysate);,Immunohistology (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined. |
| **Format** | 200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml. |
| **Storage** | Store at 2 to 8°C.Antibody is stable for 24 months. |
| **Precautions** | Anti-Thymidine Phosphorylase / PD-ECGF Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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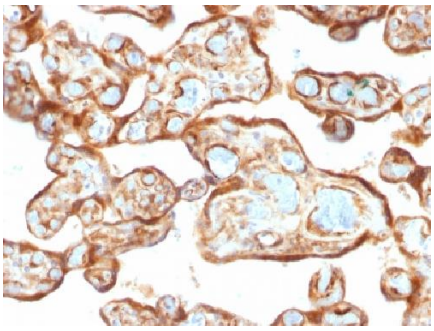
| **Name** | TYMP ( HGNC:3148) |
| **Synonyms** | ECGF1 |
| **Function** | May have a role in maintaining the integrity of the blood vessels. Has growth promoting activity on endothelial cells, angiogenic activity in vivo and |

chemotactic activity on endothelial cells in vitro.

## Background

Recognizes a protein (amino acid 482) of 55kDa (in vivo 110kDa homodimer), identified as platelet-derived endothelial growth factor (PD-ECGF), same as thymidine phosphorylase (TP) or gliostatin. In the presence of inorganic orthophosphate, it catalyzes the reversible phospholytic cleavage of thymidine and deoxyuridine to their corresponding bases and 2-deoxyribose-1-phosphate. It is both chemotactic and mitogenic for endothelial cells and a non-heparin binding angiogenic factor present in platelets. Its enzymatic activity is crucial for angiogenic activity (metabolite is angiogenic). Higher levels of serum TP/PD-ECGF are observed in cancer patients. It is also involved in transformation of fluoropyrimidines, cytotoxic agents used in the treatment of a variety of malignancies, into active cytotoxic metabolites (e.g. 5 -deoxy-5-fluorouridine to 5-FU). High intra-cellular levels of TP/PD-ECGF are associated with increased chemosensitivity to such antimetabolites.

## Images



Formalin-fixed, paraffin-embedded human Placenta stained with Thymidine Phosphorylase / PD-ECGF Monoclonal Antibody (P-GF.44C).